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This study has provided interest inventory scales for use in vocational counseling of non-college women. Two questions were investigated: (1) Do women who enter different occupations at this level have different patterns of interest, and (2) What are these patterns of interest? The Strong Vocational Interest Blank (SVIB) women's form, and a two-page questionnaire were the instruments used on samples selected from 17 occupational groups by criteria aims to provide successful, satisfied women from each occupation. The samples were usually drawn from rosters furnished by the relevant national organizations. The responses of each occupation to the SVIB were used to construct empirical scales. For each occupation, the scale contained the items that those women endorsed substantially more often than women in general. All of these scales successfully separated the groups from women in general and from each other. Thus, the main conclusion was that vocational interest inventory scales for these occupations should be useful in advising women looking for occupational possibilities. Copies of all the instruments used are included. (MU)

FINAL REPORT
Project No. 6-1820
Grant No. OEG-3-6-061820-0755

VOCATIONAL INTERESTS OF NON-PROFESSIONAL WOMEN

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December, 1968

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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TABLE OF CONTENTS

Part I: Background, Methods, Results

Part II: The Occupations

Figures

Tables

Summary

The main purpose of this study was to study the vocational interests of women in nonprofessional occupations.

Completed questionnaires and interest inventories were collected from 5,583 women in each of 17 occupations:

- Beauticians
- Dental Assistants
- Elementary Teachers
- Entertainers
- Executive Housekeepers
- Instrument Assemblers
- Interior Decorators
- Licensed Practical Nurses
- Life Insurance Underwriters
- Radiologic Technologists
- Saleswomen
- Secretaries
- Stewardesses
- Sewing Machine Operators
- Telephone Operators
- WAC (Army Enlisted)
- WAVE (Navy Enlisted)

Three types of information were collected from each occupational sample: 1) their responses to the Strong Vocational Interest Blank; 2) some basic demographic information such as age and education; 3) and some information as to their perception of their jobs.

Scales for the SVIB were constructed for each of these occupations, and they were reasonably successful in discriminating between the occupations and Women-in-General, and between various pairs of occupations; the results suggest strongly that the women at this level of the occupational spectrum pay considerable attention to the nature of the work when choosing a job, as opposed to taking one that best fits their hours or pays the most money.

The demographic information for each occupation is presented in the report; for the total group, the average age was 41, and the educational level was slightly past high school though many of the samples have some specialized post-high school training, they had, on the average, 14 years of experience on their jobs. About 60 percent were married.

The job description information is also summarized for each occupation in the report.

The main conclusion was that interest inventory scales can reflect differences between women in different occupations at the nonprofessional level, and such scales should be useful to counselors working with women seeking employment at this level.

Part I

Background, Methods, Results

This portion of the report covers the procedural details and contains the comparisons across all occupational samples.

Chapter 1

The Background for the Problem

The Problem

Counseling women is difficult at best because women's lives usually include marriage and a family. This difficulty is accentuated with girls who enter the job market immediately after high school for it has often been easiest for a counselor to assume that the girl who does not go on to college will find a job somewhere for a few years and then marry and leave the working world. This presumes that the type of job is not too important, but the accumulating facts dispute that point of view.

In 1964, nearly 25 million women were employed in the United States, and they constituted 35 percent of the total labor force--up from 28 percent in 1947. Their median age was 41 years--up from 34 years in 1945, 57 percent of them were married and living with their husbands--up from 30 percent in 1940 (U.S. Dept. of Labor, 1966). Thus, in the last 25 years, the number and proportion of working women has increased, and the typical woman worker is no longer young and unmarried but fortyish, married and with about 20 years of employment ahead of her.

Of the 25 million working women in 1964, only 20 percent attended college and only 10 percent of them graduated (U. S. Dept. of Labor, 1966). Therefore at least 20 million women in the labor force were in occupations which required technical training, a high school education, or less. These facts suggest that many of the women in the labor force without college educations will work a good many years of their lives despite marriage and family responsibilities. In fact, these women seem likely to come from families for whom a supplementary income may be very important.

There is a need for effective vocational counseling with women, young and old, who enter the labor force without college training and take jobs in clerical, sales, industrial and service occupations. Counseling can increase both their satisfaction with the job and, thus, performance on the job. Unfortunately, the tools for counseling this group are few. The jobs have been described (U. S. Dept of Labor, 1966) but the workers have not, for there are few studies which concentrate on the characteristics of women who go into non-professional occupations.

Information on the patterns of vocational interests of women in various non-professional occupations would be helpful in counseling these women. Specifically, an interest inventory standardized at this level would allow non-college women who are making vocational choices to compare their interests with the interests of women in the fields which are open to them.

This project has concentrated on that task. The Strong Vocational Interest Blank, an interest inventory widely used with college-bound students, was administered to several hundred women in each of 17 occupations; these were, with one or two exceptions, occupations requiring either no post-high school training, or else some non-collegiate training, e.g., beauticians. They were, in many respects, the "skilled-trades" for women.

Two main questions were under investigation: first, do women who enter different occupations at this level have different patterns of interest? If, as some have thought, economic factors or convenience are the main reasons women take these jobs, then entry into the occupation should be relatively random with little "assortive mating" taking place between the woman and the job--but enough research has been done with men at these levels that we can be almost certain that this is not true. Even under a variety of economic, sociological, and psychological constraints, people tend to sift into jobs that interest them.

The second major question was: what are these patterns of interests among non-professional women?--how can they be described and quantified? The answers to those questions constitute the bulk of this report.

Some Background on Interest Measurement

In the 1920's, psychologists began to study systematically the interests of men in various occupations. E. K. Strong, Jr., a pioneer in this field, realized that if a technique could be developed to differentiate between the characteristics of men who become, say, doctors, from those who become lawyers, the method could be used in counseling young people faced with such decisions. In 1927, he introduced the Strong Vocational Interest Blank (SVIB) for men, which included scales for 27 professional occupations such as doctor, lawyer, accountant, and city school superintendent. In 1933, he introduced his SVIB for women with scales which included Nurse, Librarian, Life Insurance Saleswoman, and Office Worker. These inventories have helped thousands of young people to compare their interests with the interests of people in various occupations, largely at the professional level. Over the years new scales were added and old scales were revised (Strong, 1943; Campbell, 1966).

Although Strong's work included a few samples from nonprofessional occupations, e.g., printers and carpenters, most of his research was oriented toward the upper portion of the business spectrum, usually those jobs requiring some college. Partially this was because Strong believed--on the basis of some early research--that men in the nonprofessional areas were less likely to show unique patterns of interests from occupation to occupation.

In the 1940's and 50's, Clark, working with occupational groups such as bakers, electricians, and plumbers, demonstrated that it is possible to find sizable differences in measured interests between such occupations if one uses the appropriate item content and appropriate analytic techniques; specifically, these occupations must be contrasted with each other (or with a sample of Men-in-General drawn from these occupations) instead of comparing them with professional Men-in-General (Clark, 1961).

The project reported here followed Clark's lead. The first step was to study several samples of women in nonprofessional occupations to determine if unique patterns could be identified for each occupation (and, in general, they were) and the second step was to suggest methods that this information could be used in counseling settings. The major purpose was to accumulate information that could be used to help young women who are not college-bound make informed choices among the post-high school choices that are open to them.

Chapter 2

Methodology

The Instruments

The Strong Vocational Interest Blank

The interest inventory used in this project was the Strong Vocational Interest Blank, women's form. This is a 398 item inventory, containing mainly items about vocational activities. To each of these, the respondent is asked to answer "Like," "Indifferent," or "Dislike." Although there are some varieties from section to section, the general item format is that of a three choice item.

The SVIB is divided into eight sections labelled as follows:

I Occupations
II Amusements
III Activities
IV Types of People
V Order of Preference of Activities
VI Preference between Two Items
VII Your Abilities and Characteristics
VIII School Subjects

Within each of these sections, the major emphasis is on occupational activities, for those items have proven to be the most effective in discriminating between occupations.

The women's SVIB booklet had been revised shortly before this project began. The main changes were:

1) to eliminate those items now obsolete, such as "Aviatrix" or "Read the Literary Digest."
2) to eliminate the invalid items, which were usually those with very high or very low endorsement rates.
3) to eliminate items that were in poor taste.
4) to add items in areas not well covered previously, such as art, technology, and business.
5) to add items appropriate to the lower level occupations, thus increasing the usable range of the SVIB--which, incidentally, made it more appropriate for this study.

A copy of the SVIB is included in Appendix A.

The SVIB was used here, as opposed to developing a new inventory, because:

1) a great deal of information is available on the SVIB item characteristics from previous research.
2) the SVIB has been used with many professional occupational groups, and this would permit many direct comparisons between professional and non-professional occupations.

3) the findings of this research could be more easily assimilated by counselors if they could be reported as scores on an already familiar psychological instrument.
4) scoring one inventory for both professional and non-professional scales is more efficient than administering and scoring two inventories, both from the counselor's and client's point of view.

On the cover page of the SVIB, the respondents were asked to record a considerable amount of information including address, age, marital status, number of children, highest degree, years of education, years of experience, job duties, and whether or not they enjoyed their work.

The Questionnaire

A two page questionnaire (see Appendix A) was used for most of the occupational groups. It asked why the subjects entered their jobs, what their future plans were, and also contained a job description check list consisting of 25 adjective pairs arranged in a semantic-differential type format. This was an experimental approach to see if meaningful descriptive information could be gathered on the nature of the jobs that these women held.

The Occupations

Once the instruments were prepared, they were administered to 17 occupational groups.

The choice of the occupations to be studied was based on several considerations. First, the occupations chosen should not require college training but might require technical training beyond high school. Second, the occupations chosen should represent a broad range of activities, including paramedical, industrial, clerical, artistic, and service occupations. Third, the occupations chosen should represent either occupations which a large number of women enter, or occupations which are so unusual that they add a new dimension to our understanding of the occupational world. Finally, representatives of the occupations chosen must be available for study in some practical way.

Within these restrictions, the following occupations were included here:

1. Beauticians
2. Dental Assistants
3. Elementary Teachers
4. Executive Housekeepers
5. Instrument Assemblers
6. Interior Decorators
7. Licensed Practical Nurses
8. Life Insurance Underwriters

9. Entertainers
10. Radiologic Technologists
11. Retail Saleswomen
12. Secretaries
13. Sewing Machine Operators
14. Airline Stewardesses
15. Telephone Operators
16. WAC Enlisted Personnel
17. WAVE Enlisted Personnel

Several of these occupations studied were on a list of 36 occupations in which over 100,000 women were employed in 1960 (U.S. Dept. of Labor, 1966, p.92). They included Secretary, Saleswoman, Elementary Teacher, Secretary, Telephone Operator, Assembler, Hairdresser, Inspector, Practical Nurse and Housekeeper. We had hoped to study waitresses, an occupation which also employs over 100,000 women but, after several frustrating attempts, we were unable to find a source of a large sample of waitresses. The only professional occupations on the U. S. Department of Labor list were Elementary Teacher, Nurse, Secondary Teacher, and Musician-Music Teacher. This fact suggests that, the previous research in the measurement of women's interests has benefited a rather small proportion of women workers.

A special comment needs to be made about the inclusion of the Elementary Teachers in this study. This was done because Strong's previous research showed that elementary teachers seemed to be oriented toward home, family, and other traditional feminine activities, as opposed to professional career activities. As it has been 30 years since SVIBs were collected from Elementary Teachers, it seemed useful to collect a more recent sample. Some elementary teachers might be indignant at being included with these other groups, but our motivation was simply in trying to understand where they fit into the occupational spectrum.

The number of women employed in an occupation is probably not an accurate reflection of the number of women who have interests like members of that occupation. For women, more than for men, entry into various occupations is related to social mores, educational opportunity, and family circumstances as well as economic variables. As previously noted, some occupations which do not employ large numbers of women were chosen because they were unusual and would contribute something quite different to our knowledge. These included occupations like Entertainer, Women Army and Navy personnel, , Stewardess, and Interior Decorator. Some of these also met the criteria of eventually employing large numbers of women; for example, Interior Decorator and Entertainer are occupations which will probably expand in an increasingly affluent society.

A detailed description of the source of each occupational group will be included in subsequent chapters discussing each occupational study separately.

Sample Selection

The selection of the specific sample within each occupation followed the proceedures that have evolved in earlier SVIB research. The target population in each occupation was "successful, satisfied women working in the typical setting." To select such a sample, the following guidelines were followed (some deviations were necessary in specific instances--they are discussed in the chapters dealing with each occupation):

1. Satisfaction. Earlier research has shown that the occupational sample should be restricted to those who enjoy their work, and the most efficient means of determining this is to simply ask a straightforward question, "Do you like your work?" and eliminate anyone who answers in a negative way. As a further hurdle, only those with at least three years of experience in their jobs were used, assuming that this reflects at least a minimum level of satisfaction with the work, and also that this insures the individual has had enough exposure to the work to know if she likes it or not.

2. Success. Measures of success are difficult to obtain and, assuming the person is performing at an adequate level, do not seem to be a crucial screen in identifying the normative sample. Where possible, the samples were restricted to those who had achieved some minimum level of proficiency, such as being licensed or certified, and, again, the three years minimum experience was used as a minimum level. Anyone who has survived three years is not a total failure. Where it was possible to obtain performance measures, they were used; thus, the life insurance underwriters sample includes only members of the Women Leader's Roundtable of the National Association of Life Underwriters--women who have an annual production of $250,000.

3. Age. When birthdates were available, the initial mailing was sent to those women between the ages of 25 and 55. The lower level was used as insurance that the person's interests had stabilized; the older level to exclude those who had entered the occupation several decades earlier, when the world was considerably different. This criteria was treated more as a desirable goal, not a fixed hurdle, for other research has shown that age is less important than the above criteria in defining the final sample.

4. Specific recommendation of the sampled occupation. These samples were drawn after consulting with some representative of the occupation, usually the national organization, or some elected officer, or someone in the appropriate personnel office. These people usually had some specific recommendations for drawing the most appropriate sample, and we followed these suggestions as closely as possible. The suggestions varied, of course, from occupation to occupation, and the relevant points are discussed in the chapters dealing with the occupations singularly.

Data Collection

After an occupation was chosen for study, the first task was to find a source of subjects meeting the above criteria. Procuring the necessary list of names and addresses led to employers, licensing agencies, unions, and voluntary organizations. Most, but not all, of the groups approached were quite cooperative. Some restricted the information in various ways; a few refused to cooperate ostensibly because of time pressures; one, a more militant women's organization, refused to cooperate because they didn't want their members studied as women--rather they felt that both sexes should have been included and treated, apparently, as interchangeable. With these few exceptions, the organizations were cooperative and, after some consultation, a suitable method was agreed upon for selecting a sample from their individual record systems. The specific sampling procedures for each group are described in the chapters on each occupation.

Once a sample had been selected, a hand addressed mailing, including a cover letter written explicitly for the members of that occupation, was sent to each sample member. Examples of these letters are in Appendix B. The general format was an appeal for cooperation on the basis of helping others, a guarantee of confidentiality, and a promise to return a personal report of the individual's scores. In addition to the cover letter, the packet included the SVIB, the questionnaire, and a prepaid return envelope.

Returns usually began to arrive three or four days after the mailing. Each SVIB was checked for completion, and incomplete blanks were returned to the senders with an explanation of the need for complete responses. At this point, completed blanks were separated into four groups; those:

1. Acceptable for criterion sample
2. Unacceptable because:

    a. They disliked their work
    b. They were not currently employed in that occupation.
    c. They had less than 3 years' experience

Non-responders received follow-up letters or cards after three or four weeks. Table 1 is a summary of the numbers of requests mailed out and the percentage return for each occupational group as well as the percentages of the returns which fell into each of the four groups.

Insert Table 1 about here

Table 1
Mailing Results

	Total Mailed	Total N	Return Percent	UNUSABLE RETURNS (in percent of total returns) Disliked Work	Not Employed	Less than 3 yrs Experience	Late	Criterion Sample N	Criterion Sample Percent of Total Returns
Beautician	1062	540	51	14	34	0	4	262	48
Dental Assistant	696	447	64	5	1	0	2	418	92
Elementary Teacher	500	365	73	4	0	5	2	325	89
Entertainer	575	128	19	6	0	18	0	104	82
Executive Housekeeper	700	330	47	0	2	11	2	281	85
Instrument Assembler	561	183	33	36	5	9	1	89	49
Interior Decorator	500	185	37	3	0	0	0	178	96
Licensed Practical Nurse	765	276	36	13	1	0	5	222	81
Life Insurance Underwriter	365	219	60	1	0	12	1	188	86
Radiologic Technologist	708	417	59	5	8	13	0	307	74
Saleswoman	613	280	46	14	0	0	0	242	86
Secretary	680	517	76	11	7	7	0	390	75
Stewardess	971	680	70	21	3	11*	0	440	65
Sewing Machine Operator	1179	366	31	15	1	3	1	295	81
Telephone Operator	400	204	51	30	0	2	5	129	63
Army-Enlisted (WAC)	427	242	57	4	0	0	6	218	90
Navy-Enlisted (WAVE)	450	252	56	8	0	4	3	213	86
TOTAL	11,152	5583	62					4301	77

* Less than 6 months experience

The groups varied considerably in their rate of response from 19 percent for the entertainers and 31 percent for sewing machine operators to 76 percent for secretaries. The rate of response seemed to have little relationship to amount of education or the source from which the sample was drawn. The two occupations which had the most formal education were elementary teacher (16 years) and interior decorator (15 years) yet elementary teachers responded at one of the highest rates, interior decorators at one of the lowest rates. Samples which originated in employer's files, such as the sewing machine operator and stewardess samples responded at diverse rates. Samples which originated in organizational files, such as the dental assistant and licensed practical nurse samples also responded at diverse rates. Thus, rate of response is the result of a complex set of variables such as the timing of the request, the form of the request to participate, the attitude of the subjects toward cooperating in research projects in general, with the weight of each variable differing over occupational groups. We do know, from these and other projects, that there is a wide range from organization to organization in the care taken in maintaining address files, and it is not always apparent to an outsider just how accurate the addresses are. This factor is one of the largest determiners of percentage response--yet it is virtually impossible to determine the accuracy without doing a thorough study of the non-respondents.

Overall, the average rate of response, weighting each group equally, was 50 percent. This figure is not very impressive if one wants an absolutely representative sample of people on each mailing list. Yet, compared to the possible maximum return, it is certainly adequate.

We have found, for example, in the diverse projects conducted by our institute, that the absolute maximum return for a sample, given a perfect mailing list, is about 85 percent. The other 15 percent are simply unattainable--perhaps they just died, or are in the middle of a messy divorce, or are traveling in the Far East, or--a slightly different category--are adamantly opposed to questionnaires, psychological tests, and surveys. While one can account for these by doing a thorough study of non-respondents by telephone, the actual data can never be collected. Although the proportion may vary markedly from group to group, 15 percent can be considered a useful "ballpark" estimate.

Beyond this percentage, another sizable portion of non-respondents can be attributed to mailing list characteristics. Out-of-date addresses are the obvious, and the biggest, problem; another one is the "occupation identification quandary. On any occupational roster will be a few people who are there for peculiar reasons, people who do not consider themselves part of that occupation. A nurse, for example, may retain her membership in the professional association even though she is now dancing in a chorus line and sees her future in the theater. These people will usually discard survey material which asks them to respond

"because we are interested in studying nurses." This type of "self-selection out" is undoubtedly good as it cleanses the final sample of those not committed to that work, but it does increase the non-respondent percentage.

The percentage of the above two categories varies over occupations, but the limits are probably zero to thirty percent.

The only non-respondents who could and should be included here are those procrastinators who simply never got around to filling in the forms. A string of follow-ups might work, but the payoff is so low that that approach was not tried. With minor exceptions, each occupational sample was sent an original mailing and one follow-up postcard. If that did not secure a large enough criterion group, another fresh sample was selected and another mailing was sent. For example, for the beautician study about 500 women were asked to participate, but the rate of response and the number of usuable replies made it necessary to send requests to 500 more women a month later. The purpose was to insure a large enough criterion group to be representative of employed beauticians who were satisfied with their work.

The percentage of usable replies also varied widely across occupational groups. Again, the percentage who were no longer employed or who had less than three years experience probably reflected the characteristics of the mailing list. For example, 34 percent of the respondents in the beautician group were no longer employed as beauticians. The source of the beautician sample was licensing records, and apparently many beauticians keep up their licenses even if they are not employed.

Respondents were eliminated from the criterion samples if they said they disliked, or were indifferent to, their work; this percentage ranged from 0.3 percent for the executive housekeeper sample to 36 percent for the instrument assembler sample. The percentage of women who dislike their jobs was probably even higher among the non-respondents, though the proportion of dislikers among the non-respondents was probably not constant over all occupations. For example, one might speculate--and emphasize that this is speculation--that the 21 percent of stewardess respondents who said they disliked their jobs represented a large proportion of the total sample who disliked their jobs because stewardesses are not reluctant to "tell it like it is," while the 36 percent of instrument assemblers who said they disliked their jobs might have represented a smaller proportion of the total dislikers because instrument assemblers might be more reticent about voicing negative feelings. Probably, however, the percent responding dislike in each occupation was a fair approximation of the level of job satisfaction in that occupation.

The general strategy followed in data collection was to collect a sample of successful, satisfied women from the occupation. Purity of sample was considered more important than size, and if there were any doubts about an individual's appropriateness for inclusion, she was usually eliminated.

An occupational group was considered completed when no more responses had been received for a period of several weeks, though there were inevitable stragglers, as shown in Table 1, whose responses arrived too late for analysis. For general information, a chart showing the rate of response for two samples is presented in Figure.

Insert Figure 1 about here

The two curves are representative of the usual shape of the returns curve, even though they represent considerably different rates of return; in both samples, roughly half of the returns came in the first two weeks and the remainder dribbled in over several weeks. In these, and in most samples, a follow-up postcard produces about half the returns of the initial mailing and, for that, was clearly worth the time and expense.

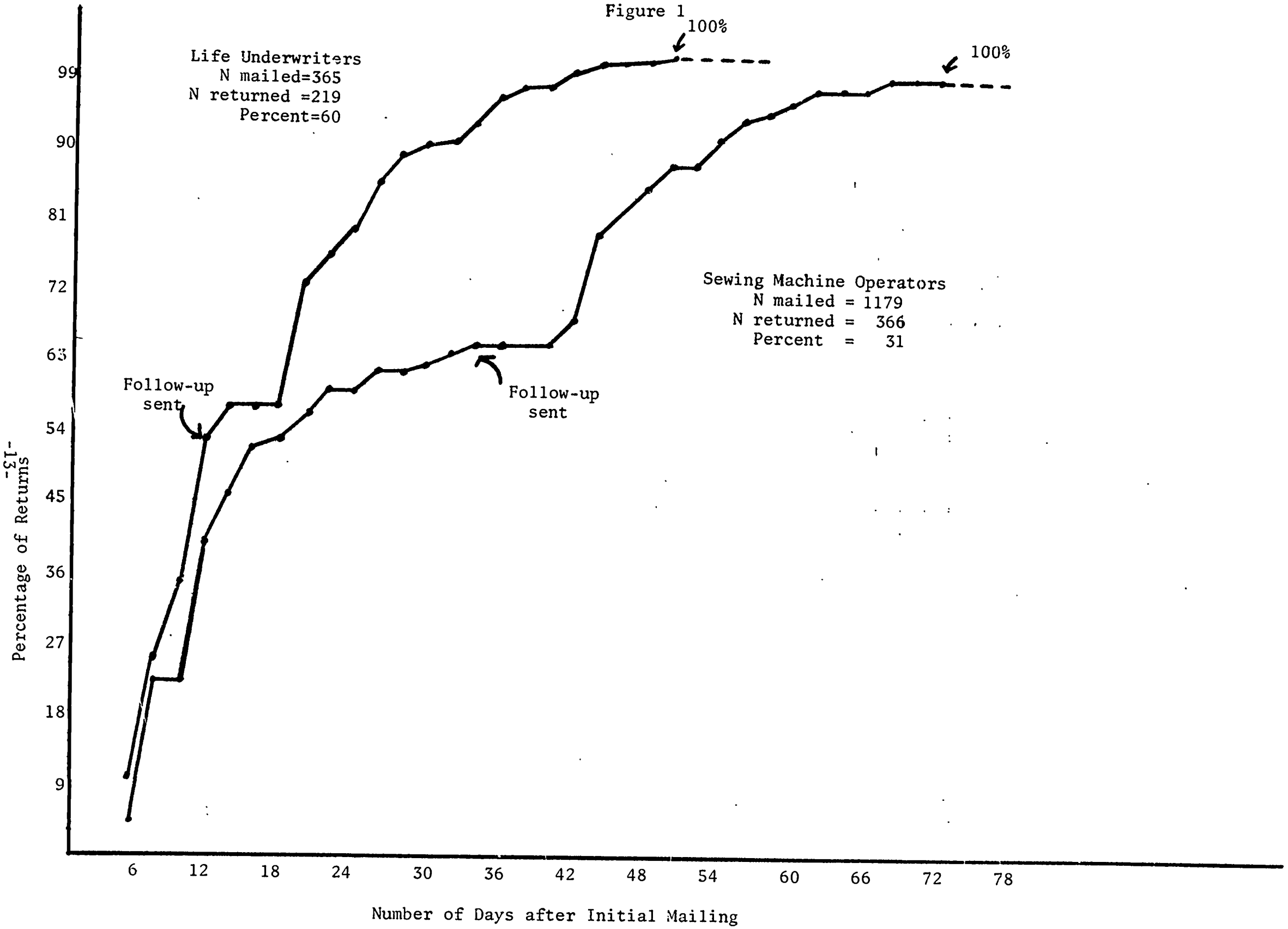
When the group was completed, the SVIB and questionnaire responses were punched on IBM cards, the SVIB was scored, and the mean profile for each occupation was calculated. At this point, each respondent was sent a copy of her own results, along with the average for her occupation. With these results were sent the memorandum, "Fourteen Points to Help You Understand Your Results," which is included in Appendix B.

Although this mailing did not call for a response, many women did write and comment on their results. Literally dozens have asked if their husbands or children could fill in the SVIB and receive their results. Sending back the results to the individuals involved was clearly a popular move, and probably should be done more often in research of this nature. Several women commented specifically, "This is the first time I've ever gotten any information back from one of these surveys."

Psychologists who are concerned about the public image of psychological research should take note.

When the data were all in, punched onto cards, transferred to magnetic tape, and the individual had been sent her results, the data collection phase was finished.

Figure 1


Life Underwriters
N mailed=365
N returned =219
Percent=60
100%
Sewing Machine Operators
N mailed = 1179
N returned = 366
Percent = 31
100%
Follow-up sent
Follow-up sent
Percentage of Returns
99
90
81
72
63
54
45
36
27
18
9
6
12
18
24
30
36
42
48
54
60
66
72
78
Number of Days after Initial Mailing

Chapter 3

Demographic Data

Some basic demographic data were collected from each person, and the relevant summary statistics on each occupation are presented in this chapter. This information came from the front of the SVIB booklet and the questionnaire (see Appendix A). Table 2 contains the information on age, education, and years of experience for each sample. Means, standard deviations, and ranges are presented for each variable. Information on all of the groups are reported in this chapter for comparative purposes; the same information is presented in chapters 6 to 22 , which deal with each occupation singularly.

Insert Table 2 about here

The mean ages ranged from 24 for the stewardesses to 53 for the executive housekeepers. Interestingly, when the group ages were averaged with each group weighted equally, the overall average (41) was equal to the average age of women workers in the U. S. (U. S. Department of Labor, 1966b). The stewardesses were by far the youngest, partially because--until recently--women who reached 32 had to leave this job, but mainly because it is a transitory occupation for young women and the turnover is very rapid. Even so, a few 40 year olds turned up in the sample; these were women who had survived the age restriction under a "grandfather" clause.

Almost all of the occupations had members in their twenties, except the executive housekeepers. The interior decorators and life insurance underwriters also had few younger members, partially because of the entrance hurdles to the occupations, and partially because these jobs either do not appeal to younger women or are not brought to their attention.

Several occupations contained working women in their sixties, some in their seventies.

The average education, also reported in Table 2, varied from 11 years for instrument assemblers and sewing machine operators to 16 years for elementary teachers. Surprisingly, most of the groups contained women with no high school education at all; in contrast, some of the groups with the lowest average education had members with some college experience. Clearly, the range of years of formal education within each occupation was much greater than the range between occupations. More information on the specific type of education within each occupation is given in Table 3 .

Table 2

Average Age, Education, and Experience of the Criterion Samples

Occupation	N	Age Mean	Age SD	Age Range	Education (years) Mean	Education (years) SD	Education (years) Range	Work Experience (years) Mean	Work Experience (years) SD	Work Experience (years) Range
Beautician	262	30	9.0	19-60	12	1.2	6-14	7	4.4	3-38
Dental Assistant	418	39	11.2	21-64	13	1.3	8-21	12	7.6	3-45
Elementary Teacher	325	44	12.3	23-66	16	0.9	12-18	17	10.7	3-44
Entertainer	104	34	9.7	19-61	13	2.3	6-20	13	8.9	2-40
Executive Housekeeper	281	53	6.8	34-73	12	1.9	6-19	10	6.0	3-30
Instrument Assembler	89	45	7.0	25-58	11	1.5	8-16	14	6.3	3-32
Interior Decorator	178	52	9.9	29-78	15	2.0	8-19	22	8.6	3-55
Licensed Practical Nurse	222	51	9.9	23-70	12	1.6	6-16	15	9.2	3-48
Life Insurance Underwriter	188	53	9.7	29-76	14	2.2	8-20	15	9.5	3-48
Radiologic Technologist	307	34	11.1	20-69	13	1.2	8-17	10	7.2	3-40
Saleswoman	242	52	7.7	21-65	12	1.6	6-16	15	7.6	3-41
Secretary	390	36	12.3	20-65	13	1.2	10-17	12	9.0	3-46
Sewing Machine Operator	295	45	8.8	22-65	11	1.7	3-19	11	5.8	3-41
Stewardess	440	24	3.7	20-46	13	1.3	10-17	3	3.1	1-20
Telephone Operator	129	38	8.0	24-55	12	1.0	8-14	13	6.8	3-36
Army-Enlisted	218	42	7.1	26-62	13	1.5	8-18	14	6.4	3-30
Navy-Enlisted	213	32	8.0	21-55	12	0.9	8-16	10	5.7	3-24
Unweighted Average		41.4			12.8			12.6		

The average years of experience is given in Table 2; again the range in means was great between occupations--from three years for the stewardesses to 22 years for the interior decorators--but, again, the range within occupations was almost always greater. These criterion samples were limited to those women with at least three years of experience--except for the stewardesses--and the overall average was 12.6 years of experience. Thus, we were apparently successful in our attempt to sample permanent members of these occupations. For the stewardesses, a minimum level of six months of experience was used, or half of the sample would have been eliminated. Clearly, there are few "permanent" stewardesses.

Table 3 gives the type of post high school training reported by members of each criterion group. The occupational groups differed widely in both the amount and type of post high school education; the telephone operators and sewing machine operators reported none at all, while 79 percent of the elementary teachers had a college degree. For the most part, the figures in Table 3 support what one might expect intuitively.

Insert Table 3 about here

Table 4 reports the marital status and the average number of children per married group member. The entertainer and stewardess groups were not asked to provide this information but the status of the stewardesses was inferred to be single since, in 1966, it was a condition of their employment.

While single versus married status might be related to average age, a comparison of Tables 2 and 4 shows that, excluding stewardesses, the youngest group, beauticians, were most likely to be married. In one of the older groups, life insurance underwriters whose average age was 53, almost a quarter were single, and another third were widowed or divorced.

Insert Table 4 about here

The average percent currently married across all occupations was 62 percent, excluding the stewardesses, Army enlisted and Navy enlisted, where there were administrative reasons for the low marriage rates. Thus, one out of three of the women in these samples was either single, divorced, or widowed. Clearly, this statistic is important in understanding why many of these women are in the labor force.

Table 3

Post High School Training Completed (in percent)

Occupational Group	N	Technical	Business	Paramedical	BA	MA+	Total Percent with post-high Education
Beautician	242	42	--	--	--	--	42
Dental Assistant	418	52	2	2	1	1	58
Elementary Teacher	325	--	--	--	71	8	79
Entertainer	104	--	1	1	26	1	29
Executive Housekeeper	281	--	--	--	6	2	8
Instrument Assembler	89	4	7	--	--	--	11
Interior Decorator	178	--	--	1	37	5	43
Licensed Practical Nurse	222	--	--	39	2	--	42
Life Insurance Underwriter	188	1	1	1	32	4	39
Radiologic Technologist	307	--	--	41	5	--	46
Saleswoman	242	--	1	2	4	--	7
Secretary	390	--	4	--	4	1	9
Sewing Machine Operator	295	--	--	--	--	--	0
Stewardess	440	2	3	3	9	--	17
Telephone Operator	129	--	--	--	--	--	0
Army-Enlisted	218	--	--	--	7	1	8
Navy-Enlisted	213	--	--	--	1	--	1
AVERAGE							25.8

Table 4

Current Marital Status and Average Number of Children (in percent)

Occupation	N	Single	Married	Widowed	Divorced and Separated	Average Number of Children
Beautician	262	10	82	2	6	1.7
Dental Assistant	418	24	59	6	11	1.3
Elementary Teacher	325	25	63	7	6	1.7
Entertainer	104	--	--	--	--	--
Executive Housekeeper	281	8	54	21	16	2.3
Instrument Assembler	89	8	78	1	14	2.0
Interior Decorator	178	15	52	14	19	1.4
Licensed Practical Nurse	222	17	58	16	10	2.0
Life Insurance Underwriter	188	23	40	18	19	2.0
Radiologic Technologist	307	42	48	2	8	1.2
Saleswoman	242	8	73	12	7	1.3
Secretary	390	34	53	5	8	1.3
Sewing Machine Operator	295	6	79	9	6	2.6
Stewardess	440	100	--	--	--	--
Telephone Operator	129	9	75	3	13	2.1
Army-Enlisted	218	74	12	1	12	0.3
Navy-Enlisted	213	78	13	0	9	0

The widowed and divorced rates varied markedly from occupation to occupation. The former was closely tied to age, the latter less so. For example, the divorce rate was twice as high among interior decorators (19 percent) as licensed practical nurses (10 percent) though the mean age of the two samples was almost identical (52 to 51 respectively).

The percentage of currently married women, of course, reflects the effect of the widowed and divorce rate, and this percentage also varied a great deal among the groups. Less than half of the life underwriters (40 percent) and radiologic technologists (48 percent) were married; in contrast, almost twice as many beauticians (82 percent) and sewing machine operators (80 percent) were. These figures, which differ far more than one would expect from random sampling suggest there must be some very interesting factors at work here, but they can only be inferred, not demonstrated empirically.

Table 5 shows the geographical areas from which each occupational criterion group came in percantages of the total group. The states were coded as follows:

1. New England
   Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut
2. Eastern
   New York, Pennsylvania, Maryland, District of Columbia, Delaware, New Jersey
3. South
   Kentucky, Virginia, West Virginia, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Arkansas, Louisiana, Florida
4. Southwest
   Nevada, Utah, Colorado, Texas, Oklahoma, New Mexico, Arizona
5. Midwest
   Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, North Dakota, South Dakota, Nebraska, Iowa, Kansas, Missouri
6. Northwest
   Washington, Oregon, Idaho, Montana, Wyoming
7. California, Hawaii, Alaska

The instrument assemblers, saleswomen, and secretaries were primarily Minneapolis-St. Paul area residents; the beauticians and elementary teachers included only residents of Minnesota. Several studies, (e.g., Stephenson, 1966) have shown that geographic residence and vocational interesta are unrelated, so these restrictions are unimportant. These data are reported here simply because they are of general interest.

Insert Table 5 about here

Table 5

Geographic Distribution of Criterion Groups (in percent)

Occupation	N	New England	East	South	Southwest	Midwest	Northwest	California	Other
Beautician	262	--	--	--	--	100	--	--	--
Dental Assistant	418	6	13	15	12	37	5	12	--
Elementary Teacher	325	--	--	--	--	100	--	--	--
Entertainer	104	1	28	10	12	29	1	18	1
Executive Housekeeper	281	2	11	27	7	31	4	17	1
Instrument Assembler	89	--	--	--	--	100	--	--	--
Interior Decorator	178	6	22	14	11	23	3	21	--
Licensed Practical Nurse	222	12	10	25	8	24	13	8	--
Life Insurance Underwriter	188	4	17	21	10	30	5	8	5
Radiologic Technologist	307	10	9	23	15	26	8	6	3
Saleswoman	242	--	--	--	--	100	--	--	--
Secretary	390	--	--	--	--	100	--	--	--
Sewing Machine Operator	295	--	--	21	47	32	--	--	--
Stewardess	440	--	2	1	--	71	26	--	--
Telephone Operator	129	--	--	--	61	39	--	--	--
Army-Enlisted	218	8	19	22	10	24	4	13	--
Navy-Enlisted	213	4	22	19	6	19	7	22	1

Table 6 shows the reasons checked on the questionnaire by members of each group when asked why they entered their occupation. As they could select more than one, the percentages total more than 100 percent for each group; the average number of reasons checked per woman was 3 to 5. "I enjoy the work" and "I like the people with whom I come in contact," were the two most popular items for most of the occupational groups, but there were some interesting exceptions. Instrument assemblers and sewing machine operators, contrary to most of the other occupations, more often chose reasons having to do with financial rewards than with intrinsic satisfaction. Choosing a financial reason over a satisfaction reason may suggest dissatisfaction with the job--yet each woman included here had indicated that she enjoyed her work. Still, economic factors clearly play a larger role in some jobs--generally the factory piece-rate jobs--than in others.

Checking the reason "My training prepared me for it," was not strictly related to average educational level of the group (see Table 2) as evidenced by the fact that a larger percentage of secretaries than teachers endorsed it. Probably that answer was related to specificity of training, not amount.

Members of the Army and Navy groups chose the reason, "There are good opportunities for advancement in this field" more often than did the other groups, and also more often than they chose "I enjoy the work."

The questionnaire responses to the question on long range plans were so influenced by the average age of the occupational groups that no cross group analysis was attempted.

Insert Table 6 about here

The Army and Navy groups wrote in other answers sufficiently often so that they were studied separately. The responses were difficult to classify but two major trends predominated. The first was a desire to serve their country in a meaningful, direct way, the second was a desire for travel or, more generally, a more exciting way of life than the usual office job. From scanning the data one has the feeling that more of these military women selected their occupation for unusual or at least atypical reasons than the women in any of the other more common women's occupations.

Insert Table 7 about here

Table 6

Percentages of Women answering "I entered my occupation because ____." in various ways

Occupation	Someone influenced me	Training prepared me	Best paid job available	Need the income	Enjoy the work	Hours and location good	Good opportunities for advancement
Beautician	36	23	5	10	94	41	34
Dental Assistant	54	20	7	19	88	56	29
Elementary Teacher	50	60	17	12	91	45	20
Executive Housekeeper	51	42	27	30	87	58	67
Instrument Assembler	19	6	76	65	57	57	17
Interior Decorator	41	67	11	18	91	53	41
Licensed Practical Nurse	42	45	12	19	92	49	33
Life Insurance Underwriter	59	23	19	23	70	56	58
Radiologic Technologist	57	37	5	12	79	27	29
Saleswoman	23	19	30	43	85	67	21
Secretary	28	82	22	25	84	36	30
Sewing Machine Operator	20	11	71	67	70	68	12
Telephone Operator	65	5	67	38	85	61	43
Army-Enlisted	21	12	5	5	50	4	57
Navy-Enlisted	22	8	4	5	60	4	59

(continued)

Table 6 (cont'd)

Occupation	I like people I contact	Other	N Responses	N Subjects	Mean Responses
Beautician	78	27	910	262	3.5
Dental Assistant	86	21	1585	418	3.8
Elementary Teacher	74	21	1272	325	3.9
Executive Housekeeper	80	25	1310	281	4.7
Instrument Assembler	62	15	333	89	3.7
Interior Decorator	74	33	738	178	4.1
Licensed Practical Nurse	80	39	910	222	4.1
Life Insurance Underwriter	69	42	788	188	4.2
Radiologic Technologist	67	27	1045	307	3.4
Saleswoman	84	26	965	242	4.0
Secretary	75	13	1450	390	3.7
Sewing Machine Operator	72	13	1189	295	4.0
Telephone Operator	71	19	587	129	4.6
Army-Enlisted	50	N.A.*	N.A.*	218	N.A.*
Navy-Enlisted	60	N.A.*	N.A.*	213	N.A.*

* Not available, because they tallied differently. See text.

Table 7

Birth Order Percentages for 15 Nonprofessional and 30 Professional Women's Occupations

Occupations			Percent oldest		Neither oldest
Nonprofessional	Professional	N	or only	Youngest	nor youngest
	Translators	130	70	19	11
	Chemists	173	58	17	25
	Registered Nurses	263	57	17	25
	Magazine Photographers	30	57	23	20
	Newswomen	189	56	26	19
	Psychologists	275	56	26	18
	Art Teachers	359	55	20	25
	Mathematicians	119	55	26	19
	Lawyers	235	54	22	25
	Language Teachers	287	54	18	28
	Medical Technologists	345	53	22	25
	Physicians	329	53	24	22
	Social Science Teachers	183	52	20	28
	Navy-Officers	307	52	28	20
	Librarians	410	50	28	22
	English Teachers	352	50	22	28
	Entertainers	104	49	33	18
	Business Education Teachers	250	48	23	29
	Dietitians	327	47	21	31
	Interior Decorators	172	47	29	24
	Occupational Therapists	607	47	27	26
	Artists	297	46	26	28
	YWCA Staff Members	282	46	30	24
	Directors, Christian Education	434	45	28	26
Executive Housekeepers		281	44	18	39
	Guidance Counselors	347	44	26	30
	Home Economics Teachers	373	44	24	32
Airline Stewardesses		443	43	25	32
Dental Assistants		418	41	23	36
Radiologic Technologists		307	40	27	33
Life Insurance Underwriters		187	40	25	35
	Math-Science Teachers	467	39	25	36
	Physical Therapists	267	39	30	31
Licensed Practical Nurses		222	39	15	46
Secretaries		366	38	26	36
	Army-Officers	307	38	34	28
Elementary Teachers		325	38	24	38
	HS PE Teachers	310	35	30	35
Navy-Enlisted		213	34	23	42
Army-Enlisted		218	34	30	36
Instrument Assemblers		89	31	20	48
Beauticians		262	31	30	39
Telephone Operators		129	29	22	48
Sewing Machine Operators		295	27	18	55
Saleswomen		243	27	22	50

Birth Order

One further bit of demographic data was collected from each individual, their birth order within their family, and the percentages are listed in Table 7. With the non-professional occupations are listed, for comparative purposes, the analogous percentages from 30 other women's occupational samples.

These percentages are rank-ordered by percent of first-born, and the ranking is quite dramatic. Clearly, the non-professional occupations fall toward the bottom of this ranking and have substantially fewer first borns than do the other occupations. Between the extremes, saleswomen versus language translators, the ratio approaches 3 to 1.

This finding is consistent with earlier reports showing that first-born usually achieve more academically than their siblings (e.g., Altus, 1966, Nichols 1968), but, like those studies, the data provide no explanation of why this happens. Clearly, a factor of this magnitude deserves further study.

Conclusions

The demographic data presented here make it clear that we sampled, as we intended, employed women who were reasonably committed to their work. All of them have reported they enjoy their work, and they had, on the average, over 12 years of experience. As to their other characteristics, these women were mostly in their forties, a slight majority (60 percent) were married, but the notable marriage statistic was that so many of them (40 percent) were not currently married. Their educational levels ranged widely--from less than high school for the instrument assemblers and sewing machine operators to mainly college among the elementary teachers and interior decorators. The major reasons given by most of the groups for choosing their particular line of work were that they enjoyed the work and the people they encountered; only women in the more routine factory work reported the financial factors as the more important.

The Job Description Adjective Pairs

Included in the questionnaire was a page asking the individual to rate her job on several semantic-differential type dimensions. The actual items used can be seen in Figure 2, which presents the average for all groups weighted equally.

Insert Figure 2 about here

Figure 2

Mean Job Description Checklist Ratings for the Total Sample

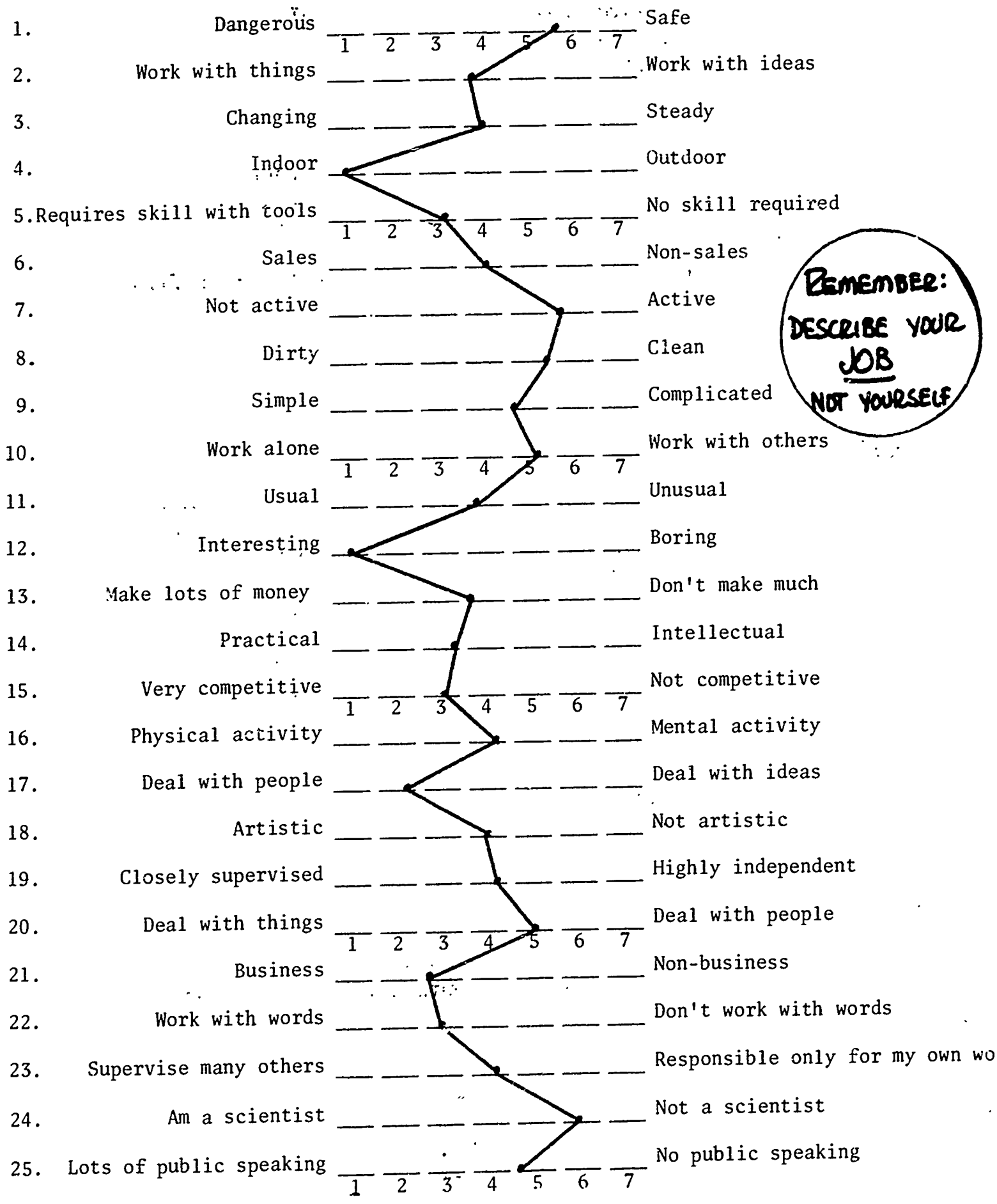


Table 8 lists the adjective pairs and the mean score of each occupation criterion group on each scale. Because entertainers and stewardesses did not complete the questionnaire only 15 of the 17 occupations studied are represented.

Insert Table 8 about here

A more graphic way of presenting the same data is utilized in Table 9, where the 15 occupations are rank ordered on each adjective pair. For brevity, names were abbreviated as follows:

Beautician	Beau	Radiologic Technologist	RT
Dental Assistant	DA	Saleswoman	Sales
Elementary Teacher	Elem	Secretary	Secy
Executive Housekeeper	ExH	Sewing Machine Operator	SMO
Instrument Assembler	InstA	Telephone Operator	TO
Interior Decorator	IntD	WAC (Army enlisted)	Army
Licensed Practical Nurse	LPN	WAVE (Navy enlisted)	Navy
Life Insurance Underwriter	LIS		

Insert Table 9 about here

This information was collected in an attempt to learn something of the individual's perception of her work. As Table 9 shows, some of the adjective pairs worked well in discriminating between the occupations; others did not.

All of the groups described their jobs as "Interesting" as opposed to "Boring," and all of the groups described their jobs as "Safe" rather than "Dangerous." Even with the restricted range of scores on the Dangerous-Safe pair, the secretary and telephone operator samples scored furthest in the Safe direction and radiologic technologists score furthest in the Dangerous direction, a reasonable ranking. Similarly, all of the groups described themselves as "Not a scientist" rather than as a 'scientist" but radiologic technologists and elementary teachers described themselves as scientists more often than the other occupational groups.

The adjective pair "Sales-Non-sales" was the most effective in spreading the occupational groups over the whole available scale--from 1.2 for the saleswomen and life insurance underwriters to 6.8 for instrument assemblers. The interior decorator and beautician samples also scored in the "Sales" direction. Other adjective pairs which separated the

Table 8

Criterion Sample Mean Scores on 25 Job Description Adjective Pairs

Scales 1 ---------- 7	Beaut	DA	Elem	ExH	InstA	IntD	LPN	LifeI	RT	Sales	Secy	SewO	TelO	Army	Navy	TOTAL
Dangerous ----------Safe	5.9	6.1	6.2	6.0	5.9	6.3	5.4	6.1	4.8	6.4	6.6	6.0	6.6	6.2	6.1	6.0
Work with ----------Work with ideas things	4.8	3.3	5.4	4.8	2.3	4.8	3.7	6.7	3.3	3.3	4.4	1.9	3.5	5.0	3.8	4.1
Changing ----------Steady	4.7	5.1	4.4	4.8	4.1	3.6	4.9	4.2	4.1	5.5	4.3	5.1	4.4	3.9	3.6	4.6
Indoor----------Outdoor	1.2	1.1	2.0	1.8	1.0	2.5	1.3	3.6	1.1	1.1	1.1	1.2	1.1	2.1	1.4	1.6
Requires skill---------No skill required with tools	1.7	2.2	4.1	3.8	2.9	4.5	3.0	5.2	2.4	5.6	3.4	3.4	4.1	4.9	3.7	3.7
Sales ----------Non-sales	2.3	4.5	5.9	5.4	6.8	1.8	5.9	1.2	6.6	1.2	5.7	5.6	4.8	5.0	6.2	4.6
Not active----------Active	6.2	6.5	5.9	6.3	5.2	6.4	6.6	6.3	6.6	6.4	5.2	6.2	4.5	5.8	5.5	6.0
Dirty ----------Clean	5.9	6.1	6.1	5.5	4.8	6.1	5.4	6.9	5.6	6.0	6.4	6.1	5.7	6.3	5.7	5.9
Simple----------Complicated	4.3	5.0	5.9	5.1	4.8	6.2	5.0	5.9	5.5	4.0	5.1	4.4	4.6	5.3	5.0	5.1
Work alone----------Work with others	5.3	5.7	6.4	6.4	5.5	5.0	5.9	3.5	5.7	6.5	5.6	6.1	6.3	6.3	5.9	5.7
Usual----------Unusual	3.6	4.3	3.6	4.0	4.1	5.9	3.9	5.3	4.7	2.9	4.2	3.0	4.1	4.6	4.3	4.2
Interesting----------Boring	1.6	1.3	1.3	1.4	2.0	1.3	1.3	1.2	1.6	1.5	1.9	2.3	1.7	1.8	1.9	1.6
Make lots of----------Don't make much money	3.6	4.1	3.9	4.1	3.2	3.7	5.0	2.4	4.0	4.5	3.8	4.1	3.6	4.3	5.1	4.0
Practical ----------Intellectual	3.1	4.1	5.6	3.7	3.5	4.2	3.6	4.8	4.2	3.2	4.4	2.4	3.8	4.4	4.0	3.9
Very competitive-------Not competitive	2.0	4.4	4.6	4.1	3.9	2.6	4.4	1.9	4.5	1.9	4.5	3.3	4.6	3.5	3.9	3.6
Physical activity------Mental activity	3.9	4.6	5.4	4.6	4.7	5.0	4.0	6.0	4.1	4.0	5.7	3.1	6.1	5.5	5.1	4.8
Deal with people-------Deal with ideas	3.0	2.2	3.3	3.1	3.6	3.8	2.1	3.3	2.0	1.9	3.0	3.2	1.7	2.6	2.7	2.8
Artistic ----------Not artistic	1.8	4.0	3.1	4.1	5.9	1.4	5.1	5.4	4.7	3.6	5.6	4.7	5.8	5.6	5.6	4.4
Closely ----------Highly independent supervised	5.6	4.2	4.5	5.3	4.2	6.3	3.4	6.5	4.3	3.8	5.6	2.9	2.0	5.4	5.0	4.6
Deal with things-------Deal with people	6.0	5.6	6.0	5.5	3.1	4.4	6.1	6.8	6.0	5.7	5.3	2.9	6.6	6.0	5.4	5.4
Business ----------Non-business	1.8	2.3	5.5	3.0	4.0	1.8	4.6	1.6	4.3	1.4	2.0	4.5	1.7	3.7	3.6	3.0
Work with words--------Don't work with words	3.9	3.3	1.5	3.2	5.5	3.1	3.7	1.6	4.0	2.8	2.1	6.5	1.9	2.6	3.2	3.3
Supervise many --------Responsible only for my own work others	5.7	5.1	4.1	1.6	6.0	3.3	5.0	6.4	4.6	5.6	5.1	6.6	5.7	3.2	3.5	4.8
Am a scientist --------Not a scientist	5.8	5.9	5.4	6.0	6.9	6.5	6.0	6.6	5.3	6.7	6.8	6.7	6.5	6.5	6.4	6.3
Lots of public --------No public speaking speaking	4.8	4.4	4.2	4.8	6.6	4.2	5.5	4.1	5.4	4.8	6.3	6.7	5.0	4.1	4.9	5.0

Table 9

Occupational Criterion Groups Rank Ordered on Job Description Adjective Pairs

Adjective Pair Mean Score	Dangerous (1)..Safe (7)	Work with things (1).. Work with ideas (7)	Changing (1)..Steady (7)	Indoor(1)..Outdoor (7)	Requires skill with tools (1).. No skill required(7)
7.0					
6.8					
6.6	Secy/TO	LIS			
6.4	Sales/IntD				
6.2	Elem/Army/DA/Navy/LIS				
6.0	ExH/SMO/InstA/Beaut				
5.8					
5.6					
5.4	LPN	Elem	Sales		Sales
5.2					
5.0		Army			LIS
4.8	RT	Beaut/ExH/IntD	LPN/ExH/Beaut		
4.6					Army
4.4		Secy	Elem/TO/Secy		
4.2			LIS		
4.0			InstA/RT		
3.8		Navy	Army		Elem/TO
3.6		LPN	IntD/Navy		ExH
3.4		TO		LIS	Navy
3.2		DA/RT/Sales			Secy/SMO
3.0					
2.8					LPN
2.6					InstA
2.4					
2.2		InstA		IntD	RT
2.0					DA
1.8		SMO		Army/Elem	
1.6				ExH	
1.4					Beaut
1.2				Navy/LPN	
1.0-1.19				Beaut/SMO	
				DA/RT/Sales/Secy/TO	
				InstA	

Table 9 (cont'd)

Adjective Pair Mean Score	Sales(1)..Non-sales(7)	Not Active(1)..Active(7)	Dirty(1)..Clean(7)	Simple(1)..Complicated(7)	Work alone(1).. Work with others
7.0			LIS		
6.8	InstA				
6.6	RT	LPN/RT			
6.4		DA/IntD/Sales	Secy		Sales/Elem/ExH
6.2	Navy	Beaut/SMO/ExH/LIS	Army	IntD	TO/Army
6.0			DA/Elem/IntD/SMO Sales		SMO
5.8	Elem/LPN	Elem/Army	Beaut	Elem/LIS	LPN/Navy
5.6	Secy/SMO		TO/Navy/RT		Secy
5.4	ExH	Navy	ExH/LPN		
5.2		InstA/Secy		Army	Beaut
5.0	Army			ExH/Secy/DA/LPN/Navy	IntD
4.8	TO		InstA	InstA	
4.6				TO	
4.4	DA	TO		SMO	
4.2				Beaut	
4.0				Sales	
3.8					
3.6					
3.4					LIS
3.2					
3.0					
2.8					
2.6					
2.4					
2.2	Beaut				
2.0					
1.8	IntD				
1.6					
1.4					
1.2	Sales/LIS				
1.0-1.19					

Table 9 (cont'd)

Adjective Pair Mean Score	Usual(1)..Unusual(7)	Interesting(1)..Boring(7)	Make lots of money(1).. Don't make much(7)	Practical(1).. Intellectual(7)	Very competitive(1).. Not competitive(7)
7.0					
6.8					
6.6					
6.4					
6.2					
6.0					
5.8	IntD				
5.6				Elem	
5.4					
5.2	LIS				
5.0			Navy/LPN		
4.8				LIS	
4.6	RT/Army				Elem/TO
4.4			Sales	Secy/Army	RT/Secy/DA/LPN
4.2	DA/Navy/Secy		Army	IntD/RT	
4.0	InstA/TO/ExH		DA/ExH/SMO/RT	DA/Navy	ExH
3.8	LPN		Elem/Secy	TO	InstA/Navy
3.6	Beaut/Elem		IntD/Beaut/TO	ExH/LPN	
3.4				InstA	Army
3.2			InstA	Sales	SMO
3.0	SMO			Beaut	
2.8	Sales				IntD
2.6					
2.4			LIS	SMO	
2.2		SMO			Beaut
2.0		InstA			Sales/LIS
1.8		Secy/Navy/Army			
1.6		TO/Beaut/RT			
1.4		Sales/ExH			
1.2		DA/Elem/IntD/LPN/LIS			
1.0-1.19					

Table 9 (cont'd)

Adjective Pair Mean Score	Physical activity(1).. Mental activity(7)	Deal with people(1).. Deal with ideas(7)	Artistic(1).. Not artistic(7)	Closely supervised(1).. Highly independent(7)	Deal with things(1).. Deal with people(7)
7.0					
6.8					LIS
6.6					TO
6.4				LIS	
6.2				IntD	
6.0	TO/LIS				LPN/Beaut/Elem/RT/Army
5.8			InstA/TO		
5.6	Secy		Secy/Army/Navy	Beaut/Secy	Sales/DA
5.4	Army/Elem		LIS	Army	ExH/Navy
5.2				ExH	Secy
5.0	Navy/IntD		LPN	Navy	
4.8					
4.6	InstA/DA/ExH		RT/SMO		
4.4				Elem	IntD
4.2				RT/InstA/DA	
4.0	RT/LPN/Sales		ExH/DA		
3.8	Beaut	IntD		Sales	
3.6		InstA	Sales		
3.4				LPN	
3.2		Elem/LIS/SMO			
3.0	SMO	ExH/Beaut/Secy	Elem		InstA
2.8				SMO	SMO
2.6		Navy/Army			
2.4					
2.2		DA			
2.0		LPN/RT		TO	
1.8		Sales	Beaut		
1.6		TO			
1.4			IntD		
1.2					
1.0-1.19					

Table 9 (cont'd)

Adjective Pair Mean Score	Business(1).. Non-Business(7)	Work with words(1).. Don't work with words(7)	Supervise many others(1).. Responsible only for my own work (7)	Am a scientist(1).. Not a scientist(7)	Lots of public speaking(1). No public speaking
7.0					
6.8				InstA/Secy	
6.6			SMO	Sales/SMO/LIS	SMO/InstA
6.4		SMO	LIS	IntD/TO/Army/Navy	
6.2					Secy
6.0			InstA	ExH/LPN	
5.8				DA/Beaut	
5.6			Beaut/TO/Sales		
5.4	Elem	InstA		Elem	LPN/RT
5.2				RT	
5.0			DA/Secy/LPN		TO
4.8					Navy/Beaut/ExH/Sales
4.6	LPN		RT		
4.4	SMO				DA
4.2	RT				Elem/IntD
4.0	InstA	RT	Elem		Army/LIS
3.8		Beaut			
3.6	Army/Navy	LPN			
3.4			Navy		
3.2		DA/ExH/Navy	IntD/Army		
3.0	ExH	IntD			
2.8		Sales			
2.6		Army			
2.4					
2.2	DA				
2.0	Secy	Secy			
1.8	Beaut/IntD	TO			
1.6	TO/LIS	LIS	ExH		
1.4	Sales	Elem			
1.2					
1.0-1.19					

occupational groups very effectively were:

Work with words ---------- Don't work with words
Supervise many others--------- Responsible only for my own work
Artistic ---------- Not artistic
Closely supervised---------- Independent
Work with things---------- Work with ideas
Business---------- Non-business

A look at almost any adjective pair in Table 9 contributes some interesting insights about the way women in various occupations describe their jobs. For instance, on the adjective phrase "Requires skill with tools-----No skill required," the beautician, dental assistant, and radiologic technologist groups rated themselves as requiring more skill with tools than did the instrument assembler or sewing machine operator groups, which could be considered the most industrial of the groups studied. On the "Very competitive----Not competitive" pair, the medical and educational occupational groups described themselves as not competitive and the sales occupational groups described their jobs as very competitive. Interestingly, the beautician group rated their job as nearly as competitive as the sales occupations and more competitive than the interior decorator group rated their job. While not obvious, it is true that if a beautician does not please her customers they are very likely to be sitting in a competitor's chair the next week.

Those readers interested in learning more about these occupations would do well to scan Table 9 more closely. In the chapters on individual occupational groups the job descriptions of each group will be discussed further.

Chapter 4
Developing Vocational Interest Scales

Interest inventories are useful tools, mainly because people report a wide range of preferences for various activities, and these preferences are important in influencing their career choices. While that may be an obvious point, it is not always fully appreciated. People in different occupations have vastly different likes and dislikes, and inventories such as the SVIB are based on these differences.

The main purpose of this project was to study the vocational interests of the nonprofessional women's occupations, and to develop scoring scales to reflect the characteristic interests of each occupation.

To emphasize and document the diversity between occupations, several tables have been prepared, showing the range of response to several SVIB items. In Tables 10-15 are shown the percentages of each criterion sample responding "Like" to various SVIB items. For comparative purposes, in a few of the tables some professional occupations are also listed.

Tables 10 and 11 show the responses to a variety of items and demonstrate both the spread between occupations--e.g., 50 percent of the stewardesses answered "Like" to being an "Artist's Model" compared to only 5 percent of the sewing machine operators--and the spread between items--e.g., "Going to church" was much more popular among most of the occupations than being an "Artist's Model."

Insert Tables 10-15 about here

Table 12 compares the answers to two similar items #176: Operating Machinery and #192: Operating office machinery, and demonstrates what happens when an item is slightly modified. The occupations toward the bottom of the ranking did not change much; interior decorators apparently do not like to operate machines, whether general or office. However, at the top of the rank-order, the occupations did shift in a meaningful way. Secretaries, telephone operators, and the enlisted women moved to the top of the rank-ordering when the word "Office" was inserted; radiologic technologists moved down. These shifts indicate how these items reflect subtle differences between the occupations.

Tables 13 and 14 demonstrate another factor at work, ie,the prestige or, perhaps, social desirability of the item, but the influence of this factor is by no means clear-cut. The two items presented in Table 13, "College Professor" and "Doing your own laundry" should differ

Table 10

	#7 Artist's Model	#183 Going to church	#38 Electronics Technician
100			
95		[DIRECTORS,CHRISTIAN EDUCATION]	
85		Elementary Teachers/Saleswomen	
		Beauticians/Licensed Practical Nurses	
		Sewing Machine Operators	
80		Dental Assistants/Executive	
		Housekeepers	
75		Telephone Operators	
70		Radiologic Technologists	
		Instrument Assemblers	
		Life Underwriters/Secretaries	
65		Stewardesses	
60			
55		Army-Enlisted/Navy-Enlisted	
50	Stewardesses	Interior Decorators	Instrument Assemblers
45			
40	Entertainers	Entertainers	
30			Radiologic Technologists
25	Beauticians		Army-Enlisted
20	Secretaries		Navy-Enlisted
15	Dental Assistants/Radiologic Technologists		Telephone Operators
10	Instrument Assemblers/Life Underwriters		Licensed Practical Nurses
	Saleswomen/Telephone Operators		Executive Housekeepers/Sewing
			Machine Operators
5	Executive Housekeepers/Army-Enlisted		Life Underwriters/Secretaries
	Interior Decorators/Elementary Teachers		Saleswomen/Stewardesses/Beauticians
	Licensed Practical Nurses/Navy-Enlisted		Dental Assistants/Entertainers
	Sewing Machine Operators		
0-4			Elementary Teachers/Interior Decorators

Table 11

	#132 Camping out	#135 Looking at things in a hardware store	#137 Planning a large party
100			
95			
90			
85			
80			
75	Stewardesses/Navy-Enlisted		Interior Decorators
70	Army-Enlisted		
65	Licensed Practical Nurses/Telephone Operators/Radiologic Technologists Sewing Machine Operators		
60		Interior Decorators	Beauticians/Secretaries Saleswomen/Life Underwriters Entertainers
55	Executive Housekeepers/Beauticians Elementary Teachers	Telephone Operators/Executive Housekeepers	Executive Housekeepers Dental Assistants
50		Elementary Teachers/Sewing Machine Operators	Instrument Assemblers Elementary Teachers
45	Entertainers/Saleswomen/Dental Assistants/Instrument Assemblers Secretaries	Instrument Assemblers/Dental Assistants Saleswomen	Licensed Practical Nurses Radiologic Technologists
40		Secretaries/Army-Enlisted/Radiologic Technologists/Navy-Enlisted/Life Underwriters/Beauticians/Licensed Practical Nurses	Sewing Machine Operators Telephone Operators
35	Life Underwriters	Entertainers	Army-Enlisted
30	Interior Decorators	Stewardesses	Navy-Enlisted
25			
20			
15			
10			
5			
0-4			

Table 12

	#176 Operating Machinery	#192 Operating office machinery
100		
95		
90		
85		
80		
75		
70		
65	[ENGINEER]	[BUSINESS EDUCATION TEACHER]
60		
55	Instrument Assemblers/Sewing Machine Operators	Telephone Operators/Secretaries
50	Radiologic Technologists	
45		Instrument Assemblers/Army-Enlisted/Navy-Enlisted Sewing Machine Operators
40	Navy-Enlisted/ Executive Housekeepers	
35	Telephone Operators/Army-Enlisted	Dental Assistants/ Executive Housekeepers/Saleswomen
30	Licensed Practical Nurses	
25	Dental Assistants/Saleswomen	Radiologic Technologists
20	Elementary Teachers/Beauticians	
15	Secretaries/Stewardesses	Licensed Practical Nurses/Beauticians/Stewardesses
		Elementary Teachers
10	Life Underwriters/Entertainers	Life Underwriters
5	Interior Decorators	Entertainers
0-4		Interior Decorators

Table 13

	#24 College Professor	#178 Doing your own laundry
100		
95	[MATHEMATICIANS]	
90	[PSYCHOLOGISTS/CHEMISTS]	
85		
80		Sewing Machine Operators
75		Saleswomen/Telephone Operators
70		
65		Executive Housekeepers/Licensed Practical Nurses
		Beauticians
60		Elementary Teachers/Instrument Assemblers
55		Dental Assistants
50		Secretaries
45	Stewardesses/Elementary Teachers	Radiologic Technologists
40		Stewardesses
35	Interior Decorators/Entertainers/Life Underwriters	
30	Dental Assistants/Secretaries/Army-Enlisted	Life Underwriters/Army-Enlisted/Navy-Enlisted
25	Licensed Practical Nurses/Navy-Enlisted	Entertainers
	Radiologic Technologists/Executive Housekeepers	
20		
15	Sewing Machine Operators/Saleswomen/Telephone Operators	Interior Decorators
	Instrument Assemblers	
10	Beauticians	[PSYCHOLOGISTS]
5		
0-4		

Table 14

#78 Physician

100
95 [PHYSICIANS]
90
85
80
75
70
65 Licensed Practical Nurses
60 Radiologic Technologists
55 Dental Assistants
50 Stewardesses
45
40 Life Underwriters/Entertainers/Army-Enlisted
35 Executive Housekeepers
30 Telephone Operators/Secretaries/Navy-Enlisted
25 Saleswomen/Elementary Teachers/Interior Decorators
20 Beauticians/Instrument Assemblers/Sewing Machine Operators
15
10
5
0-4

40

#85 Nurse's Aid

Dental Assistants/Licensed Practical Nurses
Saleswomen/Sewing Machine Operators
Telephone Operators

Instrument Assemblers
Elementary Teachers/Beauticians/Executive Housekeepers
Radiologic Technologists/Stewardesses
Army-Enlisted/Secretaries/Navy-Enlisted
Entertainers
Interior Decorators/Life Underwriters
[PHYSICIANS]

Table 15

	#37 Employment Manager	#47 Hotel Manager	#75 Office Manager	#122 Travel Bureau Manager
100				
95				
90				
85				
80				
75				
70				
65	Army-Enlisted Executive Housekeepers	Executive Housekeepers	Army-Enlisted	Stewardesses
60			Secretaries	Army-Enlisted/Secretaries/ Executive Housekeepers/Life Underwriters/ Saleswomen
55	Secretaries	Army-Enlisted		
50				
45	Life Underwriters Instrument Assemblers	Stewardesses	Dental Assistants	Dental Assistants/ Instrument Assemblers/Navy-Enlisted/ Telephone Operators/Interior Decorators
40	Dental Assistants Telephone Operators		Navy-Enlisted Executive Housekeepers	Radiologic Technologists/ Elementary Teachers
35	Navy-Enlisted	Instrument Assemblers Life Underwriters Secretaries	Telephone Operators	Licensed Practical Nurses Entertainers/Beauticians
30	Elementary Teachers Beauticians/Sewing Machine Operators	Dental Assistants Saleswomen	Saleswomen/Life Underwriters/Instrument Assemblers/Stewardesses	Sewing Machine Operators
25	Radiologic Technologists Licensed Practical Nurses	Sewing Machine Operators Entertainers/Beauticians Interior Decorators/ Telephone Operators Navy-Enlisted		
20		Elementary Teachers Radiologic Technologists Licensed Practical Nurses	Elementary Teachers	
15	Entertainers		Radiologic Technologists Beauticians/Licensed Practical Nurses Entertainers/Interior Decorators	
10	Interior Decorators			
5				
0--4				

on the prestige dimension; "College Professor" is a popular item among most educated groups--over 90 percent of women psychologists, chemists, and mathematicians responded "Like"--but among many of these non-professional samples, it was not even as popular as "Doing your own laundry." Further, Table 14 lists two medical occupations, "Physician" and "Nurse's Aid," which differ greatly in prestige. Yet these two are not all that different in popularity among these groups; in fact, five of the samples responded "Like" more often to "Nurse's Aid" than to "Physician." The prestige factor is not nearly as powerful as one might intuitively believe; the specific item content is more important.

To further emphasize the importance of item content, Table 15 shows the response percentages for these occupations to several managerial-type items. Two trends are obvious; first, the specific type of managing does matter--the executive housekeepers chose "Hotel Manager" more often, the stewardesses chose "Travel Bureau Manager." Second, some occupations are more managerially-minded than others. The Army-enlisted sample, for example, which included only high ranking non-coms, were at or near the top for each item, the interior decorators near the bottom.

In general, one can conclude from Table 15, and the preceding tables, that the responses to the SVIB items do reflect meaningful differences between occupations. The next step is to construct scoring scales that will include, for each occupation, the items that distinguish between them and the remaining occupations.

Scale Development

The usual method of developing SVIB scales is to collect inventories from a sample of an occupation to provide an estimate of the way that the people in that occupation respond to each item. These item response percentages are compared with the analogous percentages from a Women-in-General (WIG) sample to identify those items which will differentiate between women in the occupation and those not in the occupation.

The basic purpose of a WIG sample is to control for differing levels of popularity of the items. For example, the item "Interior Decorator" is a very popular item on the SVIB--over two-thirds of all women respond "Like" to that item. In contrast, the item "Waitress" is very unpopular--less than 10 percent answer "Like." Using a WIG sample controls for this varying level of endorsement by identifying only those items that the members of an occupational group answer differently from Women-in-General, as opposed to using those items answered most or least often by the occupational sample, for these items frequently are the same items answered most and least often by all women.

What kind of WIG sample should be used? Strong (1943) found earlier that the reference group should be at the same general level in the occupational spectrum as the occupation under study. But that creates problems when one is trying to study occupations over a wide range--for it is not always clear where an occupation falls along the dimension of level--and confuses the use of the resulting scales, for it is frequently not clear whether a person should be evaluated with "professional" or "non-professional" scales.

These problems occur because we know so little of the effect of alternative methods of selecting a WIG sample, and one goal of this project was to explore the results of using two different WIG samples, one drawn from all levels of women's occupations, the other drawn from only the non-professional occupations. Scales were developed using both of these groups, and the results are reported below.

A second technical problem is: how large a difference in response percentages between the occupation and the WIG sample should be used in selecting items for a scoring key? And--a related question--how many items are needed to provide a reliable scale? Earlier work by Clark (1961, p 125) suggested that validity was increased considerably by increasing the percentage difference cut-off in item selection. While Strong (1943) ultimately settled on a 6 percent minimum difference, Clark's work suggested that a 22 percent minimum difference produced a more valid scale. Although the scale based on the 22 percent key was considerably shorter, its reliability was only slightly reduced. However, Abrahams (1967) showed that with item validities held constant, reliability increases with scale length and he concluded that the length of a SVIB key must be determined by the number of valid items available.

As a result of these studies, recent SVIB scales have used minimum percentage differences between groups ranging from 14 to 22 percent (Campbell, 1966, p 35). The resulting scales have 35 to 98 items scored according to a unit (±1) weighting system (Strong, Campbell, Berdie, Clark, 1964).

In developing the scales in this study, the precedents of minimum percentage cut-offs of at least 14 percent, scales of at least 60 to 80 items, and unit weighting were followed. For example, an item with the following response percentages would be weighted as indicated:

	Item Response Percentages		
	L	I	D
Occupational Sample	86	04	10
Women-in-General Sample	50	25	25
Difference	+36	-21	-15
Scoring weight	+ 1	- 1	- 1

A third technical question involved the optimum size of the criterion groups. How large must a criterion group be to provide a reliable estimate of the response percentages of an occupational group? Strong originally concluded that an N of 300 to 500 was desirable and, in this project, we tried to achieve that, but found it difficult. Collecting 400 inventories from a single occupation is a chore, always expensive, and sometimes virtually impossible. Among the entertainers, for example, we probably expended twice as much staff time and money to collect 100 inventories as we did to collect 300 in the other samples. For that occupation, it was mainly a problem of locating names and addresses. For other occupations, such as the beauticians and instrument assemblers, the problem was one of locating enough employed women who had had at least three years of experience and who said they enjoyed their work.

In a separate study, Harmon (1968) looked more closely at the issue of sample size and concluded that, when unit weighting and high response percentage cut-offs are used in scale construction, large criterion groups are not necessary. Scales based on small samples are slightly poorer but preferable to no scales at all. Consequently, scales were developed here for all of the groups, even the smaller occupational criterion samples.

Two sets of Occupational Scales were constructed, the first set was based on comparisons between the occupational sample and a group of 1,000 Women-in-General, drawn from the entire occupational spectrum. This sample contained women from both professional and non-professional occupations, as well as some student groups; a complete listing of the sample is given in Appendix C. The scales based on these comparisons will be called the WIG$_{total}$ scales to indicate that these scales are based on the comparison between the occupations and the total sample of Women-in-General.

The second set of scales was based on comparisons between the non-professional samples and a group of Women-in-General drawn only from these same occupations, that is, from only non-professional occupations. These scales will be called WIG$_{np}$ scales, to indicate that they are based on a comparison between nonprofessional occupations and a nonprofessional WIG group.

The second scale was not developed for three of the occupations that seemed to be the most "professionally oriented" and probably did not belong in the nonprofessional group. Those occupations were:interior decorators, life insurance underwriters, and entertainers.

Table 16 contains the relevant comparisons between these two sets of scales. Included in that table are the raw score means and standard deviations for each criterion group, the standard score

means and standard deviations for the two WIG samples, a comparison of the percent overlap for both sets of scales, the number of items scored, and the minimum percent difference scored for both sets of scales.

Insert Table 16 about here

The percent overlap reported in Column 6 of Table 16 is one index of scale validity as this statistic gives the percent of scores in one distribution that can be matched by scores in the other distribution; thus, this reflects the effectiveness of the scale in separating the occupational sample from the WIG sample. If the distributions are identical, the overlap is 100 percent; if they are completely separate with no scores in common, the overlap is zero percent. The formula

$$Q = \frac{M_1 - M_2}{\frac{SD_1 + SD_2}{2}}$$

and Q table provided by Tilton (1937) allows one to determine the percentage of overlapping without actually counting the overlapping scores.

As Table 16 shows, and as should be intuitively obvious, there were fewer items showing large percent differences between the occupational samples and the non-professional WIG than between the samples and the total WIG sample.

Consequently, the WIG_{np} scales should show a lower level of validity, in the sense of separating the occupational samples from the WIG sample, and indeed they did. The separation between the two groups for the WIG_{total} scales was considerably better than for the WIG_{np} scales, with the exception of the elementary teachers. Perhaps this occupation should not have been included with the nonprofessional occupations, though, as we shall see, the data on that point are inconsistent.

But there is another measure of validity which is also important and that is the ability of the scale to separate occupations from each other. To determine that, it is necessary to look at the data in the next several tables. In Table 17 are presented the mean scores of the nonprofessional groups on all the regular SVIB scales, where all the scales are based on the WIG_{total} sample

Because they were available, scores on two of the SVIB Non-Occupational scales have been included here for each occupation, i.e., the Femininity-Masculinity scale and the Academic Achievement scale, though nothing has been said of these scales in the various discussions.

The Femininity-Masculinity (FM) scale includes items that men and women answer differently. It is normed so that the "average woman" scores 50; the "average man" scores in the low 30's. High scores, above 55, indicate stronger preferences for feminine activities, particularly art, music, and related areas, than average, low scores the opposite.

The Academic Achievement (AACH) scale contains items that characterize the interests of students who do well in high school and college. College students who do well usually score at least 45, with those earning the BA about 50, those earning the MA about 55, and PhD about 60. Dropouts average 40, and those who never enter college between 30 and 35.

2

Table 16

Scale Characteristics of WIG_{total} and WIG_{np} Non-Professional Scales

		Criterion Group (raw scores)		Women-in-General (standard scores)				
	N	WIG_{total} Mean/SD	WIG_{np} Mean/SD	Total on WIG_{total} scales (N=1000)	Nonprof on WIG_{np} scales (N=420)	Percent Overlap WIG_t/WIG_{np}	Number of Items Scored WIG_t/WIG_{np}	Minimum Percent Difference Scored WIG_t/WIG_{np}
Beautician	262	24/20	25/25	31/11	38/10	38/55	77/85	20/15
Dental Assistant	417	25/15	9/6	29/15	35/12	39/48	75/23	15/14
Elementary Teacher	325	21/15	25/11	35/13	27/13	51/32	60/70	15/14
Executive Housekeeper	280	28/16	17/9	30/13	31/12	38/39	82/47	16/14
Instrument Assembler	89	26/18	16/14	27/14	35/11	34/48	86/67	19/14
Licensed Pract. Nurse	222	33/18	30/14	27/14	30/13	33/40	86/77	18/15
Radiologic Technologist	306	17/13	17/15	31/14	36/12	43/53	67/60	14/14
Saleswoman	241	32/17	19/11	26/15	30/14	35/41	79/60	19/14
Secretary	366	21/16	17/13	33/13	35/11	45/46	75/55	14/14
Sewing Machine Operator	294	29/15	29/18	19/16	31/12	23/41	80/83	26/18
Stewardess	439	34/17	35/18	27/14	26/14	34/33	78/86	19/20
Telephone Operator	128	24/14	13/7	25/17	35/14	36/54	71/34	20/14
Army-Enlisted	218	9/15	15/21	31/11	35/10	37/44	70/86	17/15
Navy-Enlisted	213	17/18	16/24	33/11	37/10	42/51	77/83	17/15

In Table 17, the nonprofessional samples tended to score low (below 45) on most professional scales. Exceptions to this rule included the scores of licensed practical nurses on the Physical Therapist, Public Health Nurse, and Registered Nurse scales, the entertainers on the Musician Performer and Model scales, the executive housekeepers on the Dietitian scale, the interior decorators on the Librarian scale, and the radiologic technologists on the Physical Therapist and Medical Technologist scales. None of these exceptions involved a bizarre or unexpected relationship, intuitively they seem reasonable. The beautician, dental assistant, instrument assembler, life insurance underwriter, saleswoman, secretary, sewing machine operator, stewardess, telephone operator, Army enlisted and Navy enlisted groups had no high scores on any of the pre-existing SVIB scales, suggesting that their interests are not likely to show up on the traditional SVIB profile.

On the nonprofessional scales the nonprofessional groups scored higher and the relationships were not as intuitively meaningful. Thus, beauticians scored high on the Secretary scale; saleswomen scored high on the Executive Housekeeper and Telephone Operator scales; telephone operators scored high on the Dental Assistant and Instrument Assembler scales; sewing machine operators scored high on the Dental Assistant, Instrument Assembler, Telephone Operator, and Beautician scales. There appeared to be an occupational level factor operating which, in general, caused nonprofessional groups to score low on professional scales and high on nonprofessional scales.

It is this problem of level that we are attempting to study by developing a second Women-in-General group. Some of the results of this approach are shown in Table 18, which contains the scores of the nonprofessional occupations on scales based on the second Women-in-General sample, the so-called WIG_{np} sample. Within Tables 17 and 18, each occupation should score low on scales other than its own, thus minimizing the overlap between the criterion sample and other samples. Scanning the two tables makes it clear that the second set of scales, those based on the nonprofessional WIG sample, did a better job of separating the nonprofessional groups from each other than did the WIG_{total} scales. For example, beauticians averaged 40 on the Dental Assistant scale based on the WIG_{total} comparison, but only 27 on the Dental Assistant scale based on the WIG_{np} comparison.

Insert Tables 17 and 18 about here

Table 17

Mean Scores of 17 Non-Professional Samples on all SVIB Scales
(Scales based on WIG_{total})

Scales/Groups	Beau	Dent	Elem	Exec	Inst	LPN	RadT	Sales	Secy	SewO	Stew	TelO	Army	Navy	IntD	Ent	LifeI
Music Teacher	18	21	33	25	16	22	14	24	24	18	22	20	18	13	26	24	28
Musician Performer	22	24	29	25	20	25	23	26	26	19	29	22	23	21	40	44	33
Entertainer	25	20	18	16	17	17	22	19	22	12	36	18	18	19	34	50	27
Model	31	23	19	19	23	17	23	23	27	20	36	21	21	22	35	43	33
Artist	20	16	21	18	18	18	22	15	18	17	19	14	19	22	38	34	27
Interior Decorator	13	5	11	13	8	3	7	12	13	4	17	6	9	7	50	29	28
Newswoman	19	16	23	18	16	16	21	18	23	12	29	14	24	21	41	39	35
English Teacher	21	24	34	25	18	23	21	27	30	18	33	23	26	20	34	36	34
Language Teacher	24	23	36	25	20	21	20	28	33	20	33	25	24	20	36	38	36
YWCA Staff Member	24	27	30	31	22	26	25	27	29	18	38	24	33	26	32	32	39
Director,Christian Education	17	22	33	25	12	25	15	22	21	16	24	19	19	13	17	18	24
Nun-Teacher	10	18	28	22	15	26	18	17	13	20	9	17	19	17	6	7	11
Guidance Counselor	18	27	34	32	18	28	23	26	27	16	31	22	28	19	25	22	34
Social Science Teacher	23	27	35	30	23	27	26	29	32	23	32	26	32	26	29	28	36
Social Worker	11	21	25	27	16	27	22	20	20	11	20	16	25	18	23	17	31
Speech Pathologist	12	20	25	20	13	20	22	14	18	5	23	22	24	19	31	31	34
Psychologist	- 2	4	10	7	3	6	12	- 2	6	- 6	12	- 2	13	10	23	22	17
Librarian	14	22	32	29	20	26	23	25	28	19	21	20	30	25	42	32	36
Translator	12	17	25	18	16	17	22	12	19	11	21	13	22	22	35	34	26
Physician	13	23	21	22	17	29	32	13	15	13	18	14	27	28	29	26	25
Dentist	19	28	21	26	26	31	31	20	19	25	15	22	28	29	25	19	23
Medical Technologist	25	35	25	31	33	39	41	25	23	30	23	30	32	35	19	19	19
Chemist	- 8	6	7	9	4	13	14	- 4	- 1	0	- 4	0	14	14	8	4	6
Mathematician	0	7	12	10	9	12	15	0	6	7	- 2	6	16	18	15	13	12
Computer Programmer	23	23	20	21	29	20	30	19	25	22	26	26	27	30	21	23	18
Engineer	12	20	16	23	23	22	22	14	17	18	16	18	30	29	22	16	22
Army-Enlisted	32	34	29	38	40	35	35	36	34	39	30	38	50	45	22	25	35
Navy-Enlisted	39	37	30	36	43	37	40	35	35	42	32	40	46	50	26	29	32
Army-Officer	18	25	24	31	25	23	28	24	29	17	33	22	44	37	32	30	39
Navy-Officer	28	31	27	32	32	28	36	27	33	25	34	27	43	41	40	38	41

(continued)

Table 17 (cont'd)

	Beau	Dent	Elem	Exec	Inst	LPN	RadT	Sales	Secy	SewO	Stew	TelO	Army	Navy	IntD	Ent	LifeI
Lawyer	12	17	18	21	17	16	20	17	22	12	22	15	29	23	35	28	40
Life Insurance Underwriter	22	22	21	25	19	18	17	27	24	18	28	19	27	20	36	30	50
Buyer	25	27	20	31	28	25	23	34	28	29	21	26	28	24	29	19	32
Business Education Teacher	29	29	30	31	32	25	21	35	35	35	23	35	29	26	18	16	28
Home Economics Teacher	35	30	34	33	29	28	22	36	30	33	32	32	16	16	27	18	19
Dietitian	29	37	32	41	33	40	35	35	31	30	33	33	30	29	31	25	33
Physical Ed Teacher (H.S.)	36	37	31	31	34	36	39	29	29	33	38	34	34	37	14	21	23
Occupational Therapist	30	33	38	34	30	38	36	30	31	28	34	31	30	29	34	32	25
Physical Therapist	34	44	37	39	37	49	47	36	32	37	37	39	39	40	22	25	27
Public Health Nurse	30	36	36	35	28	41	36	31	31	30	33	31	27	26	18	23	26
Registered Nurse	30	39	34	33	27	44	39	31	31	28	39	31	26	26	20	26	24
Licensed Practical Nurse	33	42	34	40	35	50	37	40	29	42	26	41	31	31	16	19	24
Radiologic Technologist	37	45	29	37	40	47	51	36	31	40	35	40	38	42	19	26	22
Dental Assistant	40	50	33	41	41	47	40	43	38	45	33	45	34	36	19	22	26
Executive Housekeeper	36	41	35	50	40	43	34	45	37	44	31	44	26	32	27	35	32
Instrument Assembler	42	37	30	36	50	36	36	40	35	49	27	45	35	39	19	30	23
Elementary Teacher	40	41	50	43	41	45	35	46	40	46	35	46	34	32	25	27	30
Secretary	45	41	36	39	45	33	33	44	50	46	41	46	36	36	31	33	35
Saleswoman	38	39	34	40	40	39	30	50	37	47	31	44	31	29	21	20	28
Sewing Machine Operator	35	30	25	31	37	32	25	36	27	50	16	39	24	27	10	25	15
Telephone Operator	41	41	33	39	43	41	33	45	38	50	30	50	31	33	14	33	22
Beautician	50	38	33	36	43	35	35	41	38	46	38	43	33	36	30	33	32
Stewardess	34	30	26	27	29	23	28	33	33	23	50	30	27	26	28	26	30
Academic Achievement	32	40	45	43	37	44	43	38	40	35	40	37	45	43	46	45	44
Masculinity-Femininity II	42	42	50	44	37	45	40	46	46	41	44	42	38	38	54	50	43

Table 18

Mean Scores of 17 Nonprofessional Samples on $WIG_{(np)}$ Scales

Non-Professional Scales	Beau	Dent	Elem	Ent	Exec	Inst	IntD	LPN	Life	RadT	Sales	Secy	SewO	Stew	TelO	Army	Navy
Beautician	50	37	37	42	36	42	42	33	40	35	41	41	44	41	40	35	38
Dental Assistant	27	50	30	26	34	28	24	45	29	42	32	30	28	35	30	32	31
Elementary Teacher	25	25	50	35	30	23	42	30	32	25	30	31	24	30	25	25	23
Executive Housekeeper	23	32	33	25	50	27	37	37	40	27	33	29	28	27	28	36	29
Instrument Assembler	41	30	32	33	33	50	34	28	30	33	36	36	43	28	39	34	38
Licensed Practical Nurse	23	37	33	23	34	25	21	50	23	38	28	20	31	20	29	27	27
Radiologic Technologist	32	40	34	41	35	35	36	44	34	50	28	30	31	37	32	39	42
Saleswoman	34	30	34	23	33	32	32	28	34	20	50	33	38	26	35	23	19
Secretary	39	32	38	41	33	37	44	23	42	27	37	50	35	39	37	36	35
Sewing Machine Operator	37	30	31	23	32	37	23	32	23	27	36	30	50	19	37	26	29
Stewardess	29	26	25	43	23	21	36	20	34	27	26	31	15	50	23	25	23
Telephone Operator	39	34	34	20	35	40	16	36	18	28	42	37	47	27	50	27	28
Army-Enlisted	30	33	33	38	36	35	38	33	44	37	31	34	31	34	31	50	46
Navy-Enlisted	35	35	34	40	36	38	41	35	41	41	31	36	35	36	35	48	50

Table 19 summarizes these comparisons in a way that is easier to understand. In that table are the average scores for 16 nonprofessional groups on the 16 nonprofessional scales other than their own for both the WIG_{total} and WIG_{np} sets of scales. The third column of Table 19 shows the differences between the two sets. The positive numbers show scales where the WIG_{np} scales did a better job of separating the occupations from each other; the negative numbers indicate where the WIG_{total} scales did the better job. Eight of the 14 comparisons were positive and, in general, were larger than the negative ones, indicating that the WIG_{np} scales had a slight edge on this index of validity.

Insert Table 19 about here

It is necessary to make the same sort of comparison using professional occupations. Table 20 has the mean scores of several professional criterion groups on both the WIG_{total} and WIG_{np} nonprofessional scales. Again, one must scan that table to determine which of these sets of scales did the better job of separating professional occupations from each other. To facilitate that comparison, Table 21 has some summary statistics, analogous to Table 19.

Insert Table 20 and 21 about here

The first column in Table 21 gives the mean score for 24 professional occupations on the Beautician scale based on the WIG_{total} comparisons. The second column in Table 21 gives the mean score for the 24 professional samples on the Beautician scale based on the WIG_{np} sample, and the third column of Table 21 presents the differences between the two means. Again, positive scores favor the WIG_{np} scales, negative, the WIG_{total}. In these comparisons, there was only one which favored the WIG_{np} scales--all of the remainder were in favor of the WIG_{total} scales.

This indicates that scales for nonprofessional samples based on a total WIG sample will separate the nonprofessional sample from all professional samples better than a scale based on the item comparisons between a nonprofessional occupational sample and nonprofessional WIG.

That creates a quandary. When contrasting nonprofessional women with each other, the WIG_{np} scales are better, but when the wider spectrum of occupations is concerned, the WIG_{total} scales are better.

Table 19

Mean Scores of Non-Professional Samples on 13 WIG_{total} and WIG_{np} Scales

	WIG_{total} Scales	WIG_{np} Scales	Differences
Beautician	37*	39	-2
Dental Assistant	36	31	+5
Elementary Teacher	38	27	+11
Executive Housekeeper	36	31	+5
Instrument Assembler	35	34	+1
Licensed Practical Nurse	32	27	+5
Radiologic Technologist	35	36	-1
Saleswoman	29	30	-1
Secretary	39	36	+3
Sewing Machine Operator	27	30	+3
Stewardess	28	27	+1
Telephone Operator	34	32	+2
Army-Enlisted	34	35	-1
Navy-Enlisted	36	37	-1

*This number gives the average score of the beauticians on scales other than their own.

Table 20

Mean Scores of 24 Professional Criterion Groups on WIG-Total and WIG-NP Nonprofessional Scales

Scales		Professional Criterion Groups																						
		Artist (N=297)	Bus Ed Teacher (N=300)	Chemist (N=173)	Dietitian (N=327)	Dir, Christ Ed (N=434)	English Teacher (N=352)	Guidance Couns (N=347)	Home Econ Teach(N=373)	Lang Teacher (N=287)	Lawyer (N=235)	Librarian (N=410)	Mathematician (N=119)	Math-Sci Teacher (N=308)	Med Technologist (N=345)	Nurse (N=263)	Occ Therapist (N=607)	Phys Therapist (N=267)	Phys Ed Teacher (N=310)	Physician (N=329)	Psychologist (N=275)	Soc Sci Teacher (N=183)	Translator (N=130)	Army Officer (N=307)	Navy Officer (N=191)	YWCA Staff (N=282)
Beautician	WIG-t	24	35	18	30	28	26	26	35	27	24	24	22	30	28	32	28	31	35	22	16	27	20	26	28	28
	WIG-np	39	38	28	35	36	36	34	39	37	34	34	32	34	32	36	35	34	38	31	30	35	33	33	36	36
Dental Assistant	WIG-t	12	37	21	31	28	22	26	33	23	19	21	19	34	36	33	27	35	33	25	13	24	18	23	23	23
	WIG-np	24	27	36	33	31	28	32	32	28	27	29	29	34	42	39	35	39	35	37	32	29	32	29	29	29
Elementary Teacher	WIG-t	23	45	27	36	46	38	39	44	38	27	33	26	39	33	37	37	38	37	27	24	39	24	29	25	35
	WIG-np	49	33	42	36	53	49	45	43	48	37	48	43	37	30	37	35	37	35	39	47	46	42	35	33	44
Executive Housekeeper	WIG-t	15	40	22	37	33	26	33	38	26	25	26	19	33	31	31	30	32	29	24	18	28	19	29	25	29
	WIG-np	31	36	35	41	42	34	43	38	32	36	36	31	32	32	32	36	32	29	35	37	35	32	39	35	40
Instrument Assembler	WIG-t	16	35	22	28	19	18	19	30	20	19	19	22	32	33	27	25	30	31	22	18	21	17	23	24	19
	WIG-np	36	37	32	32	25	29	26	33	30	30	31	36	36	34	27	31	30	33	29	29	29	32	30	32	26
Licensed Practical Nurse	WIG-t	14	31	25	32	29	21	26	31	23	19	22	22	33	36	33	28	36	30	27	16	23	18	22	20	24
	WIG-np	31	19	42	33	33	26	29	30	27	24	29	36	35	42	37	34	40	31	41	32	26	31	24	24	26
Radiologic Technologist	WIG-t	19	26	35	34	21	20	24	30	22	22	23	29	36	49	40	34	43	39	37	24	22	27	28	30	23
	WIG-np	47	24	56	41	34	36	36	34	37	40	41	53	42	54	46	44	47	43	53	50	35	49	40	43	37
Saleswoman	WIG-t	9	40	11	29	26	24	26	33	24	20	21	11	29	24	26	23	27	24	15	8	25	13	22	20	22
	WIG-np	19	39	10	27	31	31	31	34	30	25	27	16	26	15	23	22	23	21	15	15	31	16	21	19	26
Secretary	WIG-t	20	49	13	30	33	33	32	35	33	29	28	16	30	25	32	29	29	31	19	17	33	23	31	31	32
	WIG-np	39	51	26	34	40	43	40	37	43	43	41	33	32	25	31	33	28	32	28	35	42	37	39	39	38
Sewing Machine Operator	WIG-t	7	30	10	20	15	11	12	24	13	10	12	12	24	21	18	14	19	19	10	0	13	6	12	12	9
	WIG-np	26	33	23	26	25	23	21	31	25	21	24	27	30	25	23	22	24	25	21	15	24	20	20	20	19
Stewardess	WIG-t	12	29	12	25	25	28	28	30	25	23	20	10	21	21	30	28	27	29	17	21	27	20	28	26	30
	WIG-np	27	23	21	27	29	34	31	29	32	31	27	20	20	23	32	32	29	29	26	33	31	32	32	31	35
Telephone Operator	WIG-t	6	40	11	26	24	20	22	30	21	15	17	11	28	26	27	22	28	26	15	5	21	19	17	17	19
	WIG-np	12	42	16	25	27	25	26	32	26	19	22	18	30	24	24	23	26	24	15	13	26	15	19	16	22
Army-Enlisted	WIG-t	22	40	31	31	29	27	32	25	26	33	29	30	35	34	27	27	31	35	29	27	30	27	40	37	32
	WIG-np	43	39	46	37	38	39	41	30	38	48	42	46	39	40	35	37	36	40	44	47	40	44	50	48	43
Navy-Enlisted	WIG-t	27	36	34	32	27	25	27	28	26	31	29	34	35	39	32	30	34	39	33	27	28	28	37	38	30
	WIG-np	49	37	50	38	36	39	38	31	39	46	43	51	42	44	38	39	39	44	47	48	40	48	48	48	41

Table 21

Mean Scores of 24 Professional Groups on Non-Professional Scales based on Two WIG Groups

Scale	WIG_t Scales	WIG_{np} Scales	Difference
Beautician	27	35	-8
Dental Assistant	25	32	-7
Elementary Teacher	34	33	+1
Executive Housekeeper	28	35	-7
Instrument Assembler	23	31	-8
Licensed Practical Nurse	25	31	-6
Radiologic Technologist	29	42	-13
Saleswoman	22	24	-2
Secretary	28	36	-8
Sewing Machine Operator	14	24	-10
Stewardess	24	29	-5
Telephone Operator	20	23	-3
Army-Enlisted	30	41	-11
Navy-Enlisted	31	42	-11

Because of the definitional problems involved with 'nonprofessional,' and because one usually cannot tell with any assurance whether he should use nonprofessional or professional scales, it is best to use scales that are appropriate for the widest range of occupations, which means using the WIG_{total} scales, and that procedure is recommended here.

The WIG_{total} and WIG_{np} scales were also compared on short-term test-retest reliability, and those results also favored the WIG_{total} scales, probably because they were the longer scales. The reliability data are presented in Table 22.

Insert Table 22 about here

The test-retest sample used included 114 college students, all girls in an introductory psychology course, who volunteered to participate for extra class credit; they were tested twice over a 30 day interval. Their means and standard deviations for both testings, and for both sets of scales are reported in Table 22, along with the test-retest correlations for each scale. If one assumes that low mean scores are good--indicating that the scale is discriminating well between these college students and the women in the occupation--then the WIG_{total} scales clearly are superior to the WIG_{np} scales. The student means were almost always lower on the WIG_{total} scales and sometimes the differences approached a full standard deviation.

Conclusions

1. All of the occupations studied here differed enough from each other in their reported interests so that scales could be developed to discriminate between them.

2. For nonprofessional occupations, scales based on a comparison with nonprofessional Women-in-General work better.

3. When working with the entire spectrum of occupations, scales based on a comparison with an all inclusive Women-in-General sample work better.

4. Nonprofessional scales developed from nonprofessional WIG do not work as well with professional occupations, for the latter score too high.

5. Scales based on the total WIG sample are slightly more reliable than scales based on the nonprofessional WIG, probably because they are longer.

6. Because of the practical problems involved, for general use it is best to use scales based on the total WIG sample.

7. A final conclusion, included here for emphasis: the professional-nonprofessional dichotomy is not a clear-cut schism. While useful as rough categories, there is a great deal of overlap between the two groups. Undoubtedly, this is a continuum, not a dichotomy, and probably a multi-dimensional one at that.

Table 22

Test-Retest Reliabilities over Two Weeks for Two Sets of Non-Professional Scales

	Women-in-General (Total) Scales			Women-in-General (np) Scales		
	Test-Retest Correlation	Test M/SD	Retest M/SD	Test-Retest Correlation	Test M/SD	Retest M/SD
Beautician	.94	32/9	31/9	.93	37/8	37/8
Dental Assistant	.94	30/13	30/14	.86	36/11	37/11
Elementary Teacher	.93	35/12	37/12	.87	36/11	36/11
Entertainer	.94	30/14	31/14			
Executive Housekeeper	.93	26/12	27/12	.87	25/10	26/10
Instrument Assembler	.94	26/12	26/12	.88	28/10	28/9
Interior Decorator	.94	12/16	12/16			
Licensed Practical Nurse	.95	27/14	28/14	.95	26/15	27/14
Life Insurance Underwriter	.95	24/13	25/14			
Radiologic Technologist	.94	35/13	35/14	.93	41/11	41/11
Saleswoman	.93	26/13	26/13	.91	24/12	23/14
Secretary	.93	34/11	34/11	.93	37/12	36/12
Sewing Machine Operator	.96	14/14	14/14	.92	21/9	20/9
Stewardess				.92	41/13	42/13
Telephone Operator				.93	27/14	28/14
Army-Enlisted	.88	30/9	30/9	.91	37/8	37/8
Navy-Enlisted	.87	32/8	31/9	.91	40/8	39/8

Chapter 5

The Basic Scales

The SVIB Occupational Scales are useful because they contain the items that distinguish between that occupation and the reference group of Women-in-General; thus, one can tell quickly by looking at an individual's scores which occupations he might find satisfying. However, these scales are not easy to use to understand the factors behind the particular pattern of interests. If, for example, a woman scored high on the women's Lawyer scale, one could say "You have the interests of women lawyers." If the individual then asks the obvious question, "What are the interests of women lawyers?", one is thrown back on his informal knowledge of women in that occupation. Although the general shape of the scores on the profile give some indication as to what are the underlying factors, interpretation would have to be indirect.

The Basic Scales were developed to make interpretation easier. Each of these scales contains items from a single content area, such as science, sales, or social service. Items were included in these scales if they correlated highly with each other; thus, the scales are internally consistent. Most of these Basic Scales contain between 8-12 items, but the test-retest reliabilities are almost as high as the longer Occupational Scales, undoubtedly because of their greater internal consistency. For a longer discussion of the construction of the Basic Scales, see Campbell, et al, 1968 .

Nineteen Basic Interest Scales have been developed for the women's profile. They are listed in tne profile in Figure 3.

Insert Figure 3 about here

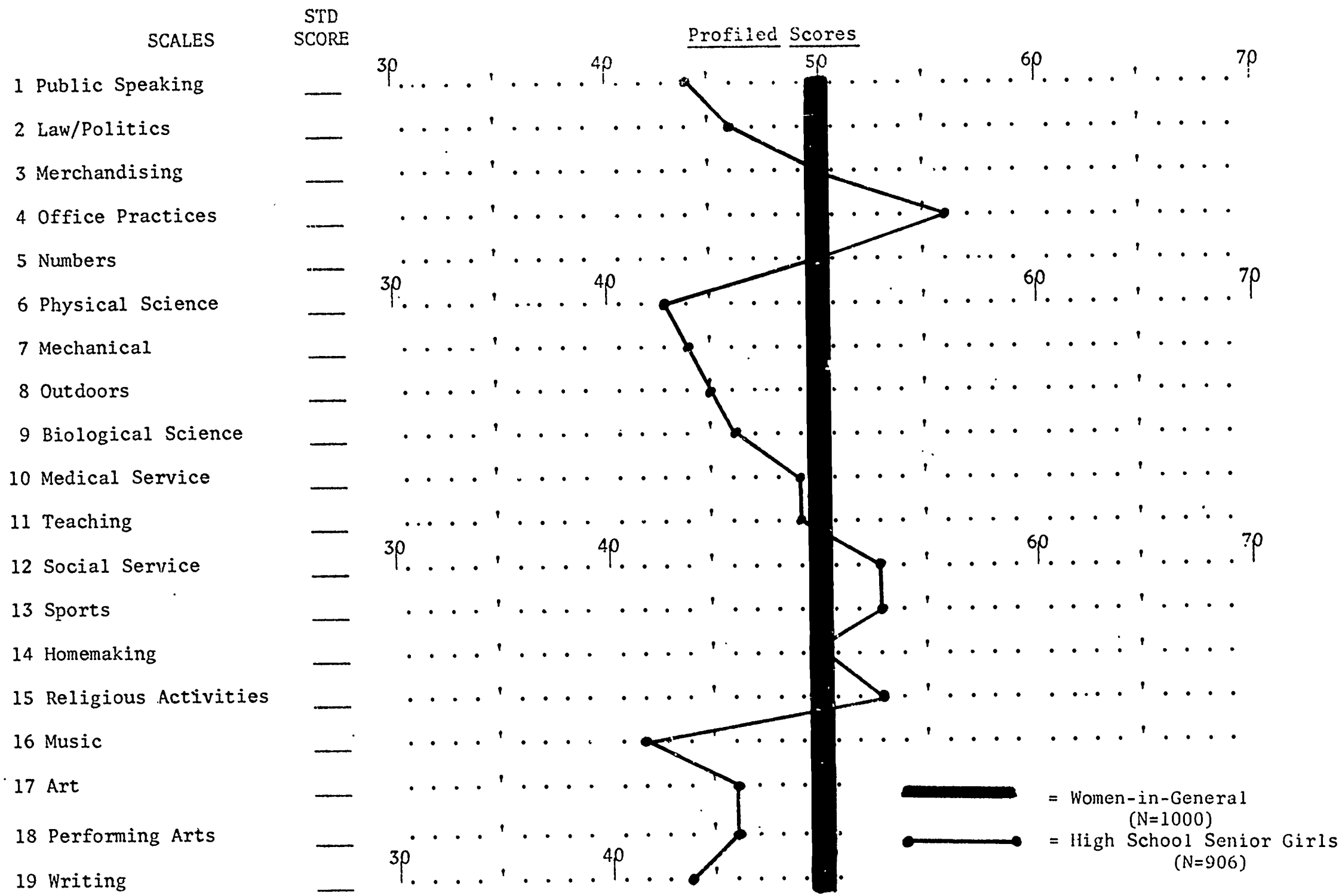
The scales have been normed so that the Women-in-General group scores 50, with a standard deviation of 10. Their mean is indicated by the solid vertical line at 50 on the form. Norms are also available for a sample of 906 high school senior girls and their mean scores are represented by the jagged line on the profile; thus scores can be compared to both adult women and teenage girls.

Scores of the 17 nonprofessional women's occupational samples are reported in Tables through for all of the Basic Interest Scales. In each table, some of the other nighest and lowest scoring occupations are listed, in brackets, for comparative purposes.

Scores for each of the occupations are presented individually in the relevant chapter on the occupation in Part II of this report. However, the reader should scan each of these tables to study the distributions of occupations on each scale. In general, they are quite reasonable,

Figure 3

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN



conform to intuition, and they are clearly easier to interpret than the SVIB Occupational Scales.

In the following tables, the scales are arranged alphabetically. A brief comment on each table follows here:

Scores of 58 or higher should be considered "high" as they usually are found only in occupations actually engaged in those types of activities; scores below 45 can be considered "low." In each table, the highest and lowest scoring occupation on file at our institute is included--these are usually one of the so-called "professions."

ART: Art Teachers and artists scored highest, with sewing machine operators at the bottom. The stewardesses scored moderately high here as they did on most of the Basic Interest Scales; this is partially because they more often than the other occupations responded with a high percentage of "Like" responses, no matter what the items. In this sense, they have the broadest interests of any group tested.

BIOLOGICAL SCIENCE: The highest scoring occupations were the medical technologists, physicians, and dentists. Among the nonprofessional samples included here, the licensed practical nurses and radiologic technologists scored high, with the dental assistants slightly lower. At the bottom were the interior decorators.

HOMEMAKING: This scale reflects the most domestic interests of the Basic Scales, at the top were the home economics teachers, with dietitians just below. Among the nonprofessionals, several occupations scored moderately high: the executive housekeepers, telephone operators, sewing machine operators, and licensed practical nurses. These occupations, most of which also scored high on the Religious Activities scale, seem to be the least career committed, and their scores here may reflect their desire to really be mothers and homemakers. At the bottom of this distribution were several professional occupations--mathematicians, photographers, and artists--and the enlisted Army personnel.

LAW/POLITICS: The women lawyers scored much higher than any other group on this scale. Among the nonprofessional groups, the life underwriters were the highest and the beauticians the lowest.

MECHANICAL: The most mechanically oriented women were the engineers with the chemists a distant second. None of the nonprofessional groups scored very high, though the radiologic technologists, instrument assemblers, and WACS were somewhat above the Women-in-General average. The life underwriters were at the bottom of the distribution of mechanical interests, which is similar to the findings among male occupations.

MEDICAL SERVICE: The licensed practical nurse scored above every other occupation, just ahead of medical technologists. Dental assistants and radiologic technologists also scored high; again, the interior decorators were at the bottom.

MERCHANDISING: At the top of the rank-order on the Merchandising scale are the saleswomen, buyers, life underwriters and, curiously, the stewardesses. None of the nonprofessional occupations scored very low.

MUSIC: On the music scale, the music teachers and musicians were considerably above everyone else, though the entertainers did have a moderately high mean score. At the bottom were the least professional of the nonprofessionals, the beauticians, sewing machine operators, and instrument assemblers.

NUMBERS: Most of the items in this scale have to do with mathematics; the women's occupations scoring highest include math-science teachers and engineers, the lowest scoring were the newswomen. None of the nonprofessional occupations scored high.

OFFICE PRACTICES: Business education teachers scored above everyone else, photographers and artists very low. This seems to be another scale, like Homemaking, that attracts those women with a low career commitment; the sewing machine operators, and telephone operators, were again high.

OUTDOORS: Items on this scale include being a rancher, living in the country and so forth. No occupation scored very high--among those studied here, the licensed practical nurses were at the top, but only four points above Women-in-General. The fashion models were at the bottom, which somehow seems appropriate.

PERFORMING ARTS: The entertainers, reasonably enough, were above everyone else with musicians next in line. At the bottom, showing a distaste for performing in public, were the sewing machine operators.

PHYSICAL SCIENCE: Several professional occupations scored far above any of the groups in the project. Women chemists, engineers, and mathematicians are far more interested in science than even the radiologic technologists, the most scientifically oriented of the groups included here. Those women most interested in feminine beauty, the beauticians and fashion models were at the bottom. Reassuringly, the secretaries can be included among them.

PUBLIC SPEAKING: Those women most drawn to these activities include YWCA staff members and speech pathologists; among the groups under study here, the life underwriters were highest. Again, the sewing machine operators and instrument assemblers were at the bottom.

RELIGIOUS ACTIVITIES: The occupations scoring highest here were indeed those involved with religion in their day-to-day occupations--Directors of Christian Education, YWCA staff members, and Catholic sisters. Several of the nonprofessional occupations scored fairly high, and, when coupled with high scores on the Homemaking and Office Practices scales, this pattern is indicative of low career interests. That appears to be a lead worth following in future research.

SOCIAL SERVICE: None of the nonprofessional occupations scored high here and only the interior decorators scored very low.

SPORTS: The stewardesses were the highest scoring nonprofessional occupation here, perhaps reflecting their youth, but they were considerably below the Physical Education teachers. Once again, the interior decorators had less interests in these activities than any other occupation.

TEACHING: The occupations at the top were all teachers, and in areas that particularly attract women--elementary teaching, religious teaching, and homemaking.

WRITING: None of the nonprofessional occupations scored very high, not nearly so high as the newswomen and English teachers. Several of them scored very low, indicating considerable distaste for literary production. Again, those "least professional" were at the bottom--the instrument assemblers, sewing machine operators and beauticians.

CONCLUSIONS

This chapter has included the mean scores of the nonprofessional women's groups on the Basic Interest Scales for the women's SVIB. The distributions of mean scores are quite reasonable, with the expected occupations scoring high and low. These scales make it easier to see the dominant pattern of interests for each occupation, and permit a reasonable rank-ordering of the occupations in each interest area.

Table 23

Mean Scores for Non-professional Women on the
ART Basic Scale

65
64
63
62
61
60 [ART TEACHERS] *
59
58
57
56 Interior Decorators/ [ARTISTS] *
55 Stewardesses
54 Entertainers
53
52
51 Elementary Teachers
50 Secretaries----------1000 Women-in-General--------
49 Beauticians
48 Executive Housekeepers/ Radiologic Technologists
47 Dental Assistants/ Life Insurance Saleswomen/ Sales Clerks
Telephone Operators
46 Instrument Assemblers/ Enlisted WACs/ Licensed Practical Nurses
45 [MATH-SCIENCE TEACHERS]/ [BUSINESS EDUCATION TEACHERS] *
Enlisted WAVEs
44 Sewing Machine Operators
43
42
41
40
39
38
37
36
35

* The bracketed occupations are the highest and lowest scoring women's occupations tested in other projects.

Table 24

Mean Scores for Non-professional Women on the
BIOLOGICAL SCIENCE Basic Scale

65
64
63
62
61 [MEDICAL TECHNOLOGISTS]
60 [PHYSICIANS]/ [DENTISTS]
59
58 Licensed Practical Nurses
57 Radiologic Technologists
56
55 Dental Assistants
54
53
52 Stewardesses
51 Enlisted WACs
50 Executive Housekeepers/ Enlisted WAVEs---1000 Women-in-General-----
49
48 Entertainers/ Elementary Teachers/ Telephone Operators
47 Sales Clerks
46 Instrument Assemblers/ Life Insurance Saleswomen/ Secretaries
45 [JOURNALISTS]/ Beauticians/ Sewing Machine Operators
[MUSIC TEACHERS]
44 Interior Decorators
43
42
41
40
39
38
37
36
35

Table 25

Mean Scores for Non-professional Women on the
HOMEMAKING Basic Scale

65
64
63
62
61 [HOME ECONOMICS TEACHERS]
60
59
58
57 [DIETITIANS]
56 Executive Housekeepers/ Telephone Operators/ Sewing Machine
Operators/ Licensed Practical Nurses
55 Sales Clerks
54 Elementary Teachers/ Beauticians
53 Dental Assistants/ Instrument Assemblers/ Stewardesses
52 Secretaries
51
50 Interior Decorators----------1000 Women-in-General------
49 Radiologic Technologists
48
47 Entertainers/ Enlisted WAVEs/ Life Insurance Saleswomen
46
45
44 Enlisted WACs/ [MATHEMATICIANS]/ [PHOTOGRAPHERS]
[ARTISTS]
43
42
41
40
39
38
37
36
35

Table 26

Mean Scores for Non-professional Women on the
LAW/POLITICS Basic Scale

65
64
63 [LAWYERS]
62
61
60
59
58 [SOCIAL SCIENCE TEACHERS]
57
56
55 Life Insurance Saleswomen
54
53 Stewardesses
52 Enlisted WACs
51
50 Interior Decorators----------1000 Women-in-General------
49 Entertainers/ Secretaries/ Enlisted WAVEs
48 Radiologic Technologists/ Elementary Teachers
47 Executive Housekeepers/ Sales Clerks/ Dental Assistants
Licensed Practical Nurses
46 Telephone Operators
45 Instrument Assemblers
44 Sewing Machine Operators/ [ARTISTS]
43 Beauticians
42
41
40
39
38
37
36
35

Table 27

Mean Scores for Non-professional Women on the
MECHANICAL Basic Scale

65 [ENGINEERS]
64
63
62
61
60 [CHEMISTS]
59
58
57
56
55
54 Radiologic Technologists/ Instrument Assemblers/ Enlisted WACs
53 Enlisted WAVEs
52 Executive Housekeepers/ Licensed Practical Nurses
51
50 Interior Decorators/ Telephone Operators---1000 Women-in-General------
49 Sewing Machine Operators/ Dental Assistants
48 Stewardesses/ Elementary Teachers
47 Sales Clerks/ Secretaries
46 Entertainers/ Beauticians
45 [ENGLISH TEACHERS]/ [SOCIAL SCIENCE TEACHERS]/ Life Insurance Saleswomen
44
43
42
41
40
39
38
37
36
35

Table 28

Mean Scores for Non-professional Women on the
MEDICAL SERVICE Basic Scale

65
64
63
62 Licensed Practical Nurses
61 [MEDICAL TECHNOLOGISTS]
60
59 Dental Assistants/ Radiologic Technologists
58
57
56
55
54
53 Executive Housekeepers/ Stewardesses
52
51 Enlisted WACs/ Telephone Operators/ Sales Clerks/ Enlisted WAVEs
50 Elementary Teachers----------1000 Women-in-General-------
49 Sewing Machine Operators/ Instrument Assemblers
48
47 Entertainers/ Secretaries/ Beauticians/ Life Insurance Saleswomen
46
45
44 [JOURNALISTS]
43 Interior Decorators/ [ARTISTS]
42
41
40
39
38
37
36
35

Table 29

Mean Scores for Non-professional Women on the
MERCHANDISING Basic Scale

65
64
63
62
61 Sales Clerks
60
59 [BUYERS]
58 Stewardesses
57 Life Insurance Saleswomen
56
55 Executive Housekeepers
54 Secretaries/ Interior Decorators
53 Beauticians/ Instrument Assemblers/ Telephone Operators
Enlisted WACs
52 Dental Assistants/ Elementary Teachers
51 Sewing Machine Operators
50 Licensed Practical Nurses---------1000 Women-in-General-------
49 Entertainers
48 Enlisted WAVEs/ Radiologic Technologists
47
46
45
44
43
42
41
40 [ARTISTS]/ [PHOTOGRAPHERS]/ [MATHEMATICIANS]
39
38
37
36
35

Table 30

Mean Scores for Non-professional Women on the
MUSIC Basic Scale

65
64
63
62 [MUSIC TEACHERS]
61
60 [MUSICIANS]
59
58
57 Entertainers
56
55
54
53 Elementary Teachers
52 Stewardesses
51 Interior Decorators
50 Secretaries/ Licensed Practical Nurses-------1000 Women-in-General
49 Executive Housekeepers/ Life Insurance Saleswomen/ Sales Clerks
48 Dental Assistants/ Telephone Operators/ Radiologic Technologists
47 Enlisted WACs/ Enlisted WAVEs / [MATH-SCIENCE TEACHERS]
46 Instrument Assemblers
45 Beauticians/ Sewing Machine Operators
44
43
42
41
40
39
38
37
36
35

Table 31

Mean Scores for Non-professional Women on the
NUMBERS Basic Scale

65
64
63 [MATH SCIENCE TEACHERS]
62 [ENGINEERS]
61
60
59
58
57
56
55
54
53 Enlisted WACs/ Executive Housekeepers
52 Instrument Assemblers/ Telephone Operators/ Enlisted WAVEs
Sewing Machine Operators/ Sales Clerks
51 Licensed Practical Nurses/ Radiologic Technologists
50 Elementary Teachers/ Life Insurance Saleswomen/ Secretaries
Dental Assistants----------1000 Women-in-General-------
49
48 Beauticians
47 Stewardesses/ Interior Decorators
46
45 Entertainers/ [ARTISTS]
44 [JOURNALISTS]
43
42
41
40
39
38
37
36
35

Table 32

Mean Scores for Non-professional Women on the
OFFICE PRACTICES Basic Scale

66 [BUSINESS EDUCATION TEACHERS]
65
64
63
62
61
60 [OFFICE WORKERS]
59 Sewing Machine Operators/ Secretaries/ Telephone Operators
58
57 Sales Clerks
56 Dental Assistants
55 Executive Housekeepers
54 Enlisted WACs/ Instrument Assemblers
53 Licensed Practical Nurses/ Enlisted WAVEs/ Elementary Teachers
52
51 Beauticians
50 Stewardesses/ Life Insurance Saleswomen/ Radiologic Technologists
---------1000 Women-in-General----------
49
48
47
46 Entertainers
45
44 Interior Decorators
43
42
41 [PHOTOGRAPHERS]/ [ARTISTS]
40
39
38
37
36
35

Table 33

Mean Scores for Non-professional Women on the
OUTDOORS Basic Scale

65
64
63
62
61
60
59
58
57
56
55 [DENTISTS]/ [PHYSICAL THERAPISTS]
54 Licensed Practical Nurses
53 Elementary Teachers
52 Sewing Machine Operators
51 Executive Housekeepers/ Telephone Operators
50 Enlisted WAVEs/ Radiologic Technologists/ Interior Decorators
Sales Clerks----------1000 Women-in-General--------
49 Enlisted WACs
48 Dental Assistants/ Instrument Assemblers/ Stewardesses
Beauticians/ Secretaries
47 [LAWYERS]
46 Life Insurance Saleswomen/ Entertainers
45 [FASHION MODELS]
44
43
42
41
40
39
38
37
36
35

Table 34

Mean Scores for Non-professional Women on the
PERFORMING ARTS Basic Scale

65
64
63
62
61
60 Entertainers
59
58
57 [MUSICIANS]
56
55 Stewardesses
54 Interior Decorators
53
52
51
50 Life Insurance Saleswomen-------1000 Women-in-General-------
49 Elementary Teachers/ Secretaries/ Sales Clerks
48 Dental Assistants/ Radiologic Technologists/ Telephone Operators
Beauticians
47 Executive Housekeepers/ Licensed Practical Nurses
46 Enlisted WACs/ [BUSINESS EDUCATION TEACHERS]
45 Instrument Assemblers/ Enlisted WAVEs/ [MATH-SCIENCE TEACHERS]
44
43 Sewing Machine Operators
42
41
40
39
38
37
36
35

Table 35

Mean Scores for Non-professional Women on the
PHYSICAL SCIENCE Basic Scale

66 [CHEMISTS]
65
64 [ENGINEERS]
63
62 [MATHEMATICIANS]
61
60
59
58
57
56
55 Radiologic Technologists
54
53 Licensed Practical Nurses
52 Enlisted WACs
51 Enlisted WAVEs/ Executive Housekeepers
50 Dental Assistants----------1000 Women-in-General
49 Instrument Assemblers
48 Stewardesses/ Telephone Operators/ Elementary Teachers
47 Sales Clerks/ Entertainers/ Interior Decorators
46 Sewing Machine Operators/ Life Insurance Saleswomen
[DIRECTORS, CHRISTIAN EDUCATION]
45 Secretaries/ [FASHION MODELS]
44
43 Beauticians
42
41
40
39
38
37
36
35

Table 36

Mean Scores for Non-professional Women on the
PUBLIC SPEAKING Basic Scale

65
64
63
62
61
60
59
58 [YWCA STAFF]
57 [SPEECH PATHOLOGISTS]
56 Life Insurance Saleswomen
55
54 Stewardesses
53
52 Interior Decorators/ Entertainers/ Enlisted WACs
51
50 Executive Housekeepers--------1000 Women-in-General----------
49
48 Elementary Teachers/ Sales Clerks/ Secretaries
47 Dental Assistants
46 Enlisted WAVEs/ Licensed Practical Nurses/ Telephone Operators
Radiologic Technologists
45 [MEDICAL TECHNOLOGISTS]
44 [ARTISTS]/ Instrument Assemblers/ Beauticians
43
42 Sewing Machine Operators
41
40
39
38
37
36
35

Table 37

Mean Scores for Non-professional Women on the
RELIGIOUS ACTIVITIES Basic Scale

65
64
63
62
61 [DIRECTORS, CHRISTIAN EDUCATION]
60
59 [YWCA STAFF]
58
57 [NUNS-TEACHERS]/ Licensed Practical Nurses
56 Sewing Machine Operators
55 Sales Clerks/ Executive Housekeepers
54 Telephone Operators/ Elementary Teachers
53 Dental Assistants/ Beauticians
52 Radiologic Technologists/ Secretaries/ Enlisted WACs
51 Instrument Assemblers/ Enlisted WAVEs
50 Life Insurance Saleswomen/ Stewardesses----1000 Women-in-General--
49
48
47
46 Interior Decorators
45
44
43 [ARTISTS]
42
41 [PSYCHOLOGISTS]
40
39
38
37 [PHOTOGRAPHERS]
36
35

Table 38

Mean Scores for Non-professional Women on the
SOCIAL SERVICE Basic Scale

65
64
63
62
61
60 [YWCA STAFF]/ [DIRECTORS, CHRISTIAN EDUCATION]
59
58
57
56
55
54 Enlisted WACs/ Licensed Practical Nurses/ Stewardesses
53 Elementary Teachers
52 Executive Housekeepers/ Telephone Operators/ Sales Clerks
Secretaries/ Dental Assistants
51 Radiologic Technologists/ Beauticians/ Instrument Assemblers
Enlisted WAVEs
50 Sewing Machine Operators----------Women-in-General----------
49
48
47 Life Insurance Saleswomen
46 Entertainers
45
44
43
42 Interior Decorators
41 [PHOTOGRAPHERS]
40 [ARTISTS]
39
38
37
36
35

Table 39

Mean Scores for Non-professional Women on the
SPORTS Basic Scale

65
64
63 [H S PHYS ED TEACHERS]
62
61
60
59 [COLLEGE PHYS ED TEACHERS]
58
57 Stewardesses
56
55
54 Enlisted WAVEs
53 Telephone Operators/ Beauticians/ Radiologic Technologists
Enlisted WACs
52 Elementary Teachers/ Licensed Practical Nurses/ Dental
Assistants
51 Sewing Machine Operators
50 Secretaries/ Sales Clerks/ Instrument Assemblers/ Executive
Housekeepers----------1000 Women-in-General----------
49
48 Entertainers/ Life Insurance Saleswomen
47
46
45
44 [JOURNALISTS]/ Interior Decorators
43
42
41 [ARTISTS]
40
39
38
37
36
35

Table 40

Mean Scores for Non-professional Women on the
TEACHING Basic Scale

65
64
63
62
61
60
59
58 Elementary Teachers/ [DIRECTORS, CHRISTIAN EDUCATION]
57 [HOME ECONOMICS TEACHERS]
56
55
54 Stewardesses
53
52 Secretaries

51 Sales Clerks/ Telephone Operators/ Licensed Practical Nurses
Executive Housekeepers
50 Dental Assistants/ Instrument Assemblers ------1000 Women-in-General
49 Sewing Machine Operators/ Entertainers/ Beauticians
48 Enlisted WACs
47 Radiologic Technologists
46 Enlisted WAVEs/ Life Insurance Saleswomen/ Interior Decorators
45
44
43 [PHOTOGRAPHERS]/ [AUTHORS]
42
41
40
39
38
37
36
35

Table 41

Mean Scores for Non-professional Women on the
WRITING Basic Scale

65
64
63
62
61
60 [JOURNALISTS]
59
58 [ENGLISH TEACHERS]
57
56
55
54 Entertainers
53 Stewardesses
52 Interior Decorators
51 Life Insurance Saleswomen
50 Elementary Teachers/ Secretaries/ Enlisted WACs
---------1000 Women-in-General----------
49
48 Sales Clerks
47 Radiologic Technologists/ Telephone Operators/ Executive Housekeepers
46 Dental Assistants/ Licensed Practical Nurses/ Enlisted WAVEs
[H S PHYS ED TEACHER]
45 [MATH-SCIENCE TEACHER]
44 Instrument Assemblers
43 Beauticians
42 Sewing Machine Operators
41
40
39
38
37
36
35

Part II

THE OCCUPATIONS

In the following chapters, each occupation is discussed briefly, with comments on the method of sampling and on their unique results. Demographic information, mean scores on the SVIB scales, and the occupation's mean responses to the Job Description Checklist are also presented.

Chapter 6

The Beauticians

Creating beauty in women is a multi-billion industry, and the beautician is at the heart of that enterprise. As such, her occupation requires a feminine interest in beauty, an artisan's technical skill, and a public relation man's talent for pleasing people.

More pragmatically, the beautician provides a wide range of beauty services including manicures, facials, and hair care procedures--permanents, shampoos, styling, cutting, setting, tinting, bleaching, and caring for wigs. Additionally, as nearly half of all beauticians own and manage small beauty shops, they must handle the other routine chores of small businesses, such as record keeping, ordering supplies, and supervising others.

Every state requires that beauty operators be licensed, by examination, upon completion of a state approved course in cosmetology or, in some states, an apprenticeship. Training is offered in public, vocational, and private schools and usually lasts six months to a year; practical work is an important part of the training. The amount of previous education required varies from eight years to a high school diploma (U. S. Dept. of Labor, 1966b).

The licensed beautician must apply her skills to all types of raw material in the form of feminine hair, skin, personality, and physique. Hardly any woman is so dependent upon the vanity of women or so vulnerable to it. She must stay well in the forefront of style changes and, to retain her customers, have some skills in applied feminine psychology.

Sample

The sample of beauticians was drawn from a list of 16,000 licensed beauticians provided by the Minnesota Board of Hairdressing Examiners. A random sample of 1062 beauticians was taken; men were excluded, as were women licensed before 1954 or after 1964. The sample included a few women from the surrounding states, Wisconsin, North and South Dakota, and Iowa. This sample was randomly divided into halves so that if the rate of useable responses was high, we could spare the expense of mailing to 1000 women.

Forms were mailed to 541 women in June of 1966. Each woman was promised confidentiality and a report of her own scores. Follow-up reminders were sent to non-respondents about three weeks later. By the end of July, it became apparent that while the beautician sample was responding as well as most of the other occupations, the respondents included a large proportion of women who were no longer employed as beauticians and thus not suitable for the criterion group. To increase the potential size of the criterion group the remaining 521 beauticians

were asked to participate and followed up as the original group had been.

By September of 1966, 520 beauticians (49 percent) had returned the forms; however, 258 were unusable, 182 because they were no longer employed as beauticians and 76 because they expressed dissatisfaction with their work. The criterion group finally included 262 beauticians.

This is only about one-fourth of the original sample drawn, and demonstrates the problem of working from lists of licensees. Such lists are difficult for the agencies to maintain, as they do not have regular contacts with their members. In addition, many women in this occupation maintain their license--and stay on the mailing list--only as a type of insurance. Many have no intention of working again unless circumstances dictate it.

The data collection from beauticians illustrates well that our basic goal was to collect about 300 completed inventories from currently employed women who say they liked their work, not necessarily to get a high rate of response from whatever list we happened to start from. Purity of sample was more important than rate of response.

Demographic Data

Table 42 provides a description of the criterion group. The average beautician in this sample was about 30 years old, married, and had two children. She had a high school education and about seven years of experience in her job. With minor exceptions, all of the subjects were from the Midwest. Fifty-eight percent listed a high school diploma as their highest degree and 42 percent listed their graduation from beauty school as their highest degree. There was some confusion as to which degree was regarded by individuals as the higher, so it is impossible to tell how many of those who listed high school as their highest degree also graduated from beauty school and vice versa. None of the criterion group graduated from college, business school or schools for paramedical occupations.

When asked to check statements on a list of reasons for entering their occupation, 94 percent checked 'I enjoy the work' and 78 percent checked "I like the people with whom I come in contact." Only five percent checked "It was the best paid job available when I needed a job," and only 10 percent said 'I need the income, otherwise I would not work." These responses suggest greater intrinsic job satisfaction among the beauticians than among some other groups such as instrument assemblers and sewing machine operators, discussed in later chapters.

Results

Figure 4 shows the mean SVIB profile for beauticians (using the regular SVIB scales, i.e., WIG_{total}). The beauticians averaged an A score on only one other scale, the Secretary scale. For the most part, they rejected verbal, aesthetic and social service occupations, and had moderately high scores on the Elementary Teacher, Dental Assistant, Instrument Assembler, and Telephone Operator scales. Women in each of these occupations tend to have some interests in office practices as demonstrated by their scores on the Basic Scales, and this may account for the moderately high scores of beauticians on their scales.

Figure 5 gives the mean scores for beauticians on the Basic Scales. Their highest scores were in the Homemaking, Merchandising, Mechanical, Sports, and Religious areas; these scores further explain why the beauticians scored high on the Occupational Scales mentioned in the preceding paragraph. The Homemaking, Sports, and Religious Activities scores suggest that beauticians have interests not directly related to their work which are as intense as those which are job related. However, none of the beauticians' means on the Basic Scales were very high; usually there is at least one mean of 57 or 58. None of the Basic Scales represent an area of activity which attracts all, or even most, beauticians.

The traditionally verbal areas, Public Speaking, Writing, and Law/Politics, were among the lowest for beauticians, and they scored low on the Physical Science scale.

Figure 6 shows the average job description expressed by beauticians. Their pattern was novel not because they described their jobs as safe, indoors, and interesting--most women do--but because they described their jobs as requiring more skill with tools than did any other group, including instrument assemblers. They also described their jobs as more business related than did secretaries, more competitive than anyone but retail and insurance saleswomen, and more artistic than anyone but interior decorators.

The SVIB items which differentiated beauticians from WIG_{total} are shown in Appendix D. In general the previously mentioned trends toward homemaking activities were apparent, as well as an interest in feminine appearance, a distaste for literary, aesthetic, social service, and scientific activities were also suggested.

Conclusions

The beauticians' duties and interests keep her from being completely devoted to her most obvious task, beauty, and take her into the related areas of sales and business and the unrelated areas of homemaking activities. Perhaps these competing areas of interest explain why so few of our initial sample were actually employed.

Beauticians do have a collection of interests which are unique from all of the others occupations studied.

Table 42

Demographic Data for the Beautician Criterion Group (N=262)

	Mean	SD	Range
Age (years)	30	9.0	19-60
Formal education (years)	12	1.2	6-14
Experience (years)	7	4.4	1-38
Number of children (of married subjects)	2	1.4	0-9

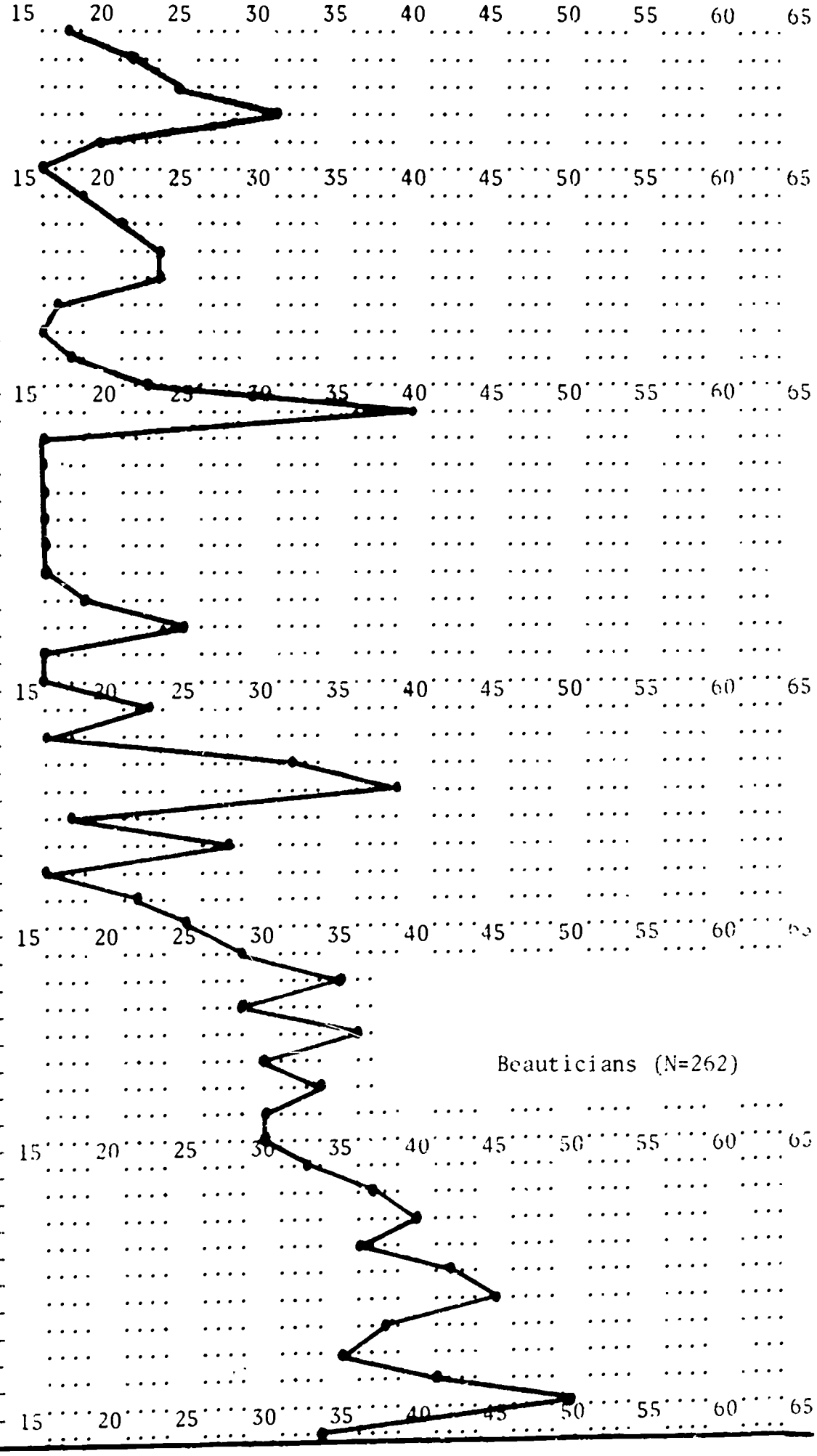
Marital Status (in percent)

Single	10
Married	82
Widowed	2
Divorced	6

Figure 4

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	18
Musician Performer	22
Entertainer	25
Model	31
Artist	20
Interior Decorator	13
Newswoman	19
English Teacher	21
Language Teacher	24
YWCA Staff Member	24
Director, Christian Education	17
Fun-Teacher	10
Guidance Counselor	18
Social Science Teacher	23
Elementary Teacher	40
Social Worker	11
Speech Pathologist	12
Psychologist	-2
Librarian	14
Translator	12
Physician	13
Dentist	19
Medical Technologist	25
Chemist	-8
Mathematician	0
Computer Programmer	23
Engineer	12
Army-Enlisted	32
Navy-Enlisted	39
Army-Officer	18
Navy Officer	28
Lawyer	12
Life Insurance Underwriter	22
Buyer	25
Business Education Teacher	29
Home Economics Teacher	35
Dietitian	29
Physical Education Teacher	36
Occupational Therapist	30
Physical Therapist	34
Public Health Nurse	30
Registered Nurse	30
Licensed Practical Nurse	33
Radiologic Technologist	37
Dental Assistant	40
Executive Housekeeper	36
Instrument Assembler	42
Secretary	45
Saleswoman	38
Sewing Machine Operator	35
Telephone Operator	41
Beautician	50
Stewardess	34



32
Academic Achievement

42
Femininity-Masculinity

Figure 5

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

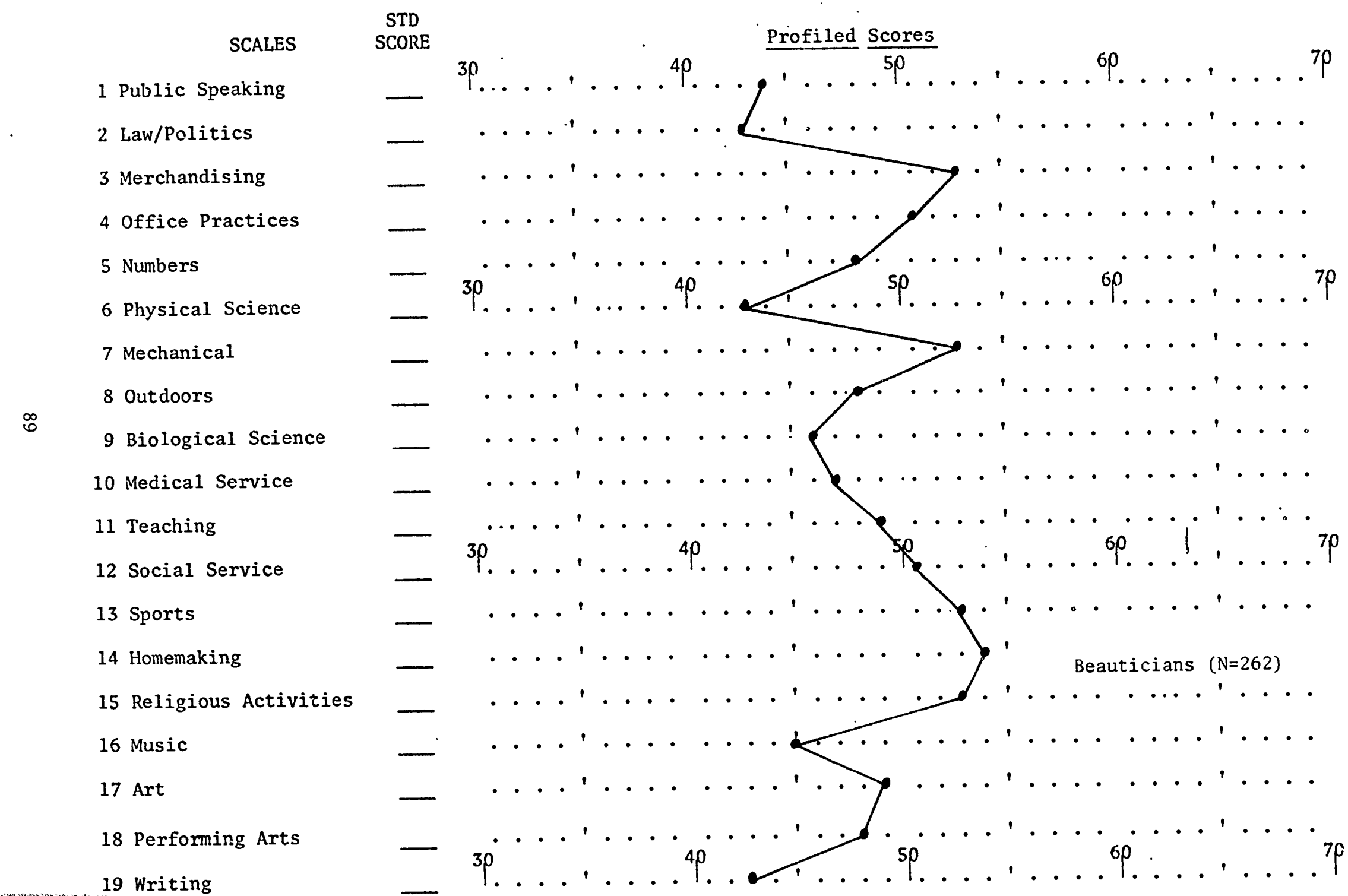
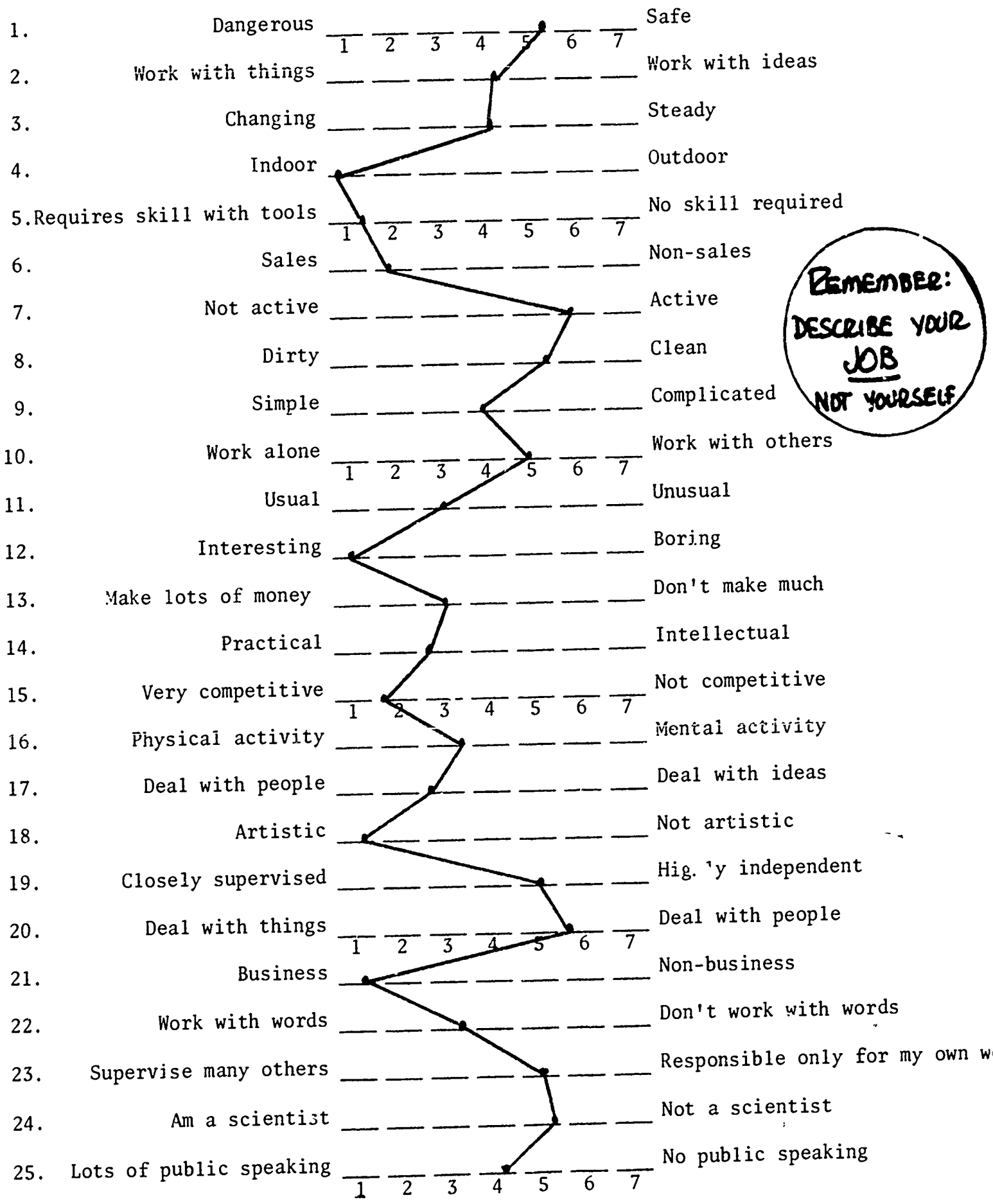


Figure 6

Job Description Checklist

Beauticians (N=262)



Chapter 7

The Dental Assistants

The dental assistant is employed by an individual dentist or a clinic. Her job is to assist the dentist by preparing patients and equipment for treatment, by doing X-Rays and lab work, and by serving as an office manager (U.S. Dept. of Health, Education, and Welfare, 1965). She usually has a high school diploma. She may be trained on the job or in a one or two year program in a dental school, junior college, or vocational school.

The dental assistant sample was obtained through the cooperation of the American Dental Assistant's Association. They made their total membership list of 14,000 available, and a random sample of 795 dental assistants, stratified geographically in proportion to membership, was drawn. They were mailed the usual forms and, after one follow-up, the rate of response was 57 percent; however, four percent were not used because they came from women who were not entirely happy with their jobs.

Demographic Data

Table 43 shows the characteristics of the final criterion group of 417 dental assistants. The average criterion group member was 39, married, and had 12 years of experience. The most usual education was technical training in the field although two percent had college degrees and two percent graduated from business schools. The most common reasons for entering dental assisting were: enjoyment of the work and the people associated with it, endorsed by 88 and 86 percent of the group respectively. Fifty-six percent also noted that the hours and location of the job fit in with their home lives.

Results

The mean SVIB profile for dental assistants is shown in Figure 7 Dental Assistants scored high (A) on only one other scale, Radiologic Technologist, and the duties of the two occupations do overlap to a certain extent. Moderately high scores (B+) were scored by dental assistants on the Secretary, Physical Therapist, Licensed Practical Nurse, and Telephone Operator scales. On the SVIB cover, there is a question which asks 'Just what do you do?' In their responses dental assistants often indicated that they performed receptionist and clerical functions in addition to those directly related to dental treatment. This probably explains their similarities to the secretaries and telephone operators. Interestingly, dental assistants' interests were quite different from those of women dentists and they scored low (C+) on the Dentist scale.

Figure 8 shows the average Basic Scale scores of the dental assistants. They scored highest on the Medical Service and Office Practices scales. These are consistant with their scores on the Occupational Scales. None of their scores were extremely low, although their lowest scores tended to be on scales having to do with verbal activities. Curiously, this group of women who, to the naive observer seem to be intimately involved with instruments of various designs, did not score high on the Mechanical scale; in fact they scored lower than Women-in-General.

Figure 9 shows how the dental assistant criterion group described their jobs. Perhaps this profile is most remarkable in that there are few outstanding differences between the way dental assistants and other groups describe their jobs. They do admit to needing somewhat more skill with tools than a number of other groups.

The items which differentiate dental assistants from WIG_{total} and WIG_{np} are in Appendix D. In general, the weighted items suggest interest in medical services and clerical activities. Verbal and aesthetic activities tend to be rejected.

Conclusions

The dental assistants' interests can be quite clearly differentiated from other occupational groups which have been studied, although there were some similarities to the interests of women in other medical services and clerical occupations.

Table 43

Demographic Data on the Dental Assistant Criterion Group (N=417)

	Mean	SD	Range
Age (years)	39	11.2	21-64
Formal education (years)	13	1.3	8-21
Experience (years)	12	7.6	3-45
Number of children (married subjects)	1	1.4	0-6

Marital Status (in percent):

Single	24
Married	59
Widowed	6
Divorced	11

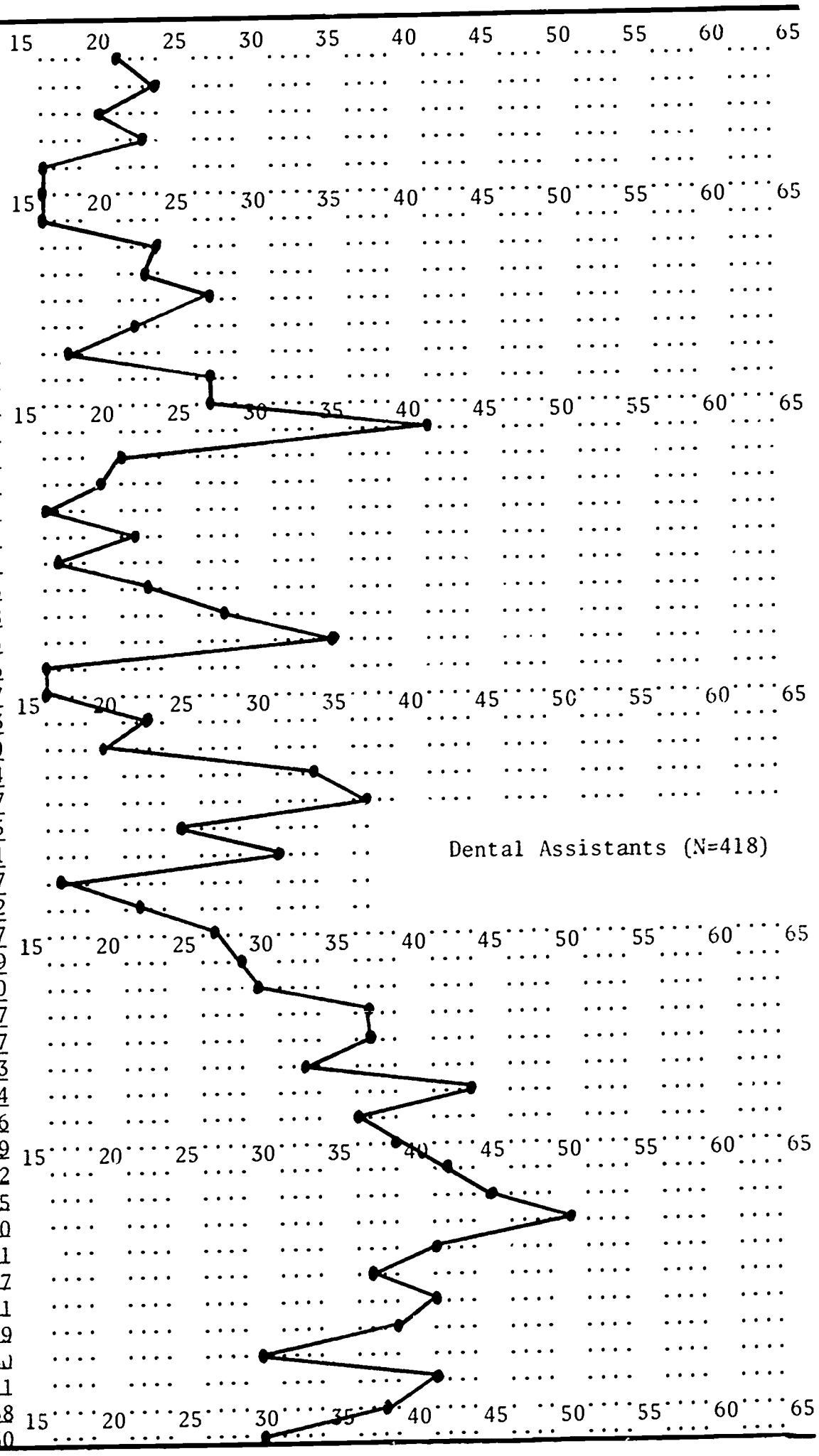
Geographical Area (in percent):

New England	6
East	13
South	15
Southwest	12
Midwest	37
Northwest	5
California	13

Figure 7

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	21
Musician Performer	24
Entertainer	20
Model	23
Artist	16
Interior Decorator	5
Newswoman	16
English Teacher	24
Language Teacher	23
YWCA Staff Member	27
Director, Christian Education	22
Nun-Teacher	18
Guidance Counselor	27
Social Science Teacher	27
Elementary Teacher	41
Social Worker	21
Speech Pathologist	20
Psychologist	4
Librarian	22
Translator	17
Physician	23
Dentist	28
Medical Technologist	35
Chemist	6
Mathematician	7
Computer Programmer	23
gineer	20
my-Enlisted	34
Navy-Enlisted	37
Army-Officer	25
Navy-Officer	31
Lawyer	17
Life Insurance Underwriter	22
Buyer	27
Business Education Teacher	29
Home Economi - Teacher	30
Dietitian	37
Physical Education Teacher	37
Occupational Therapist	33
Physical Therapist	44
Public Health Nurse	36
Registered Nurse	39
Licensed Practical Nurse	42
Radiologic Technologist	45
Dental Assistant	50
Executive Housekeeper	41
Instrument Assembler	37
Secretary	41
Saleswoman	39
Sewing Machine Operator	30
Telephone Operator	41
Beautician	38
Stewardess	30



40
Academic Achievement

42
Femininity-Masculinity

Figure 8

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

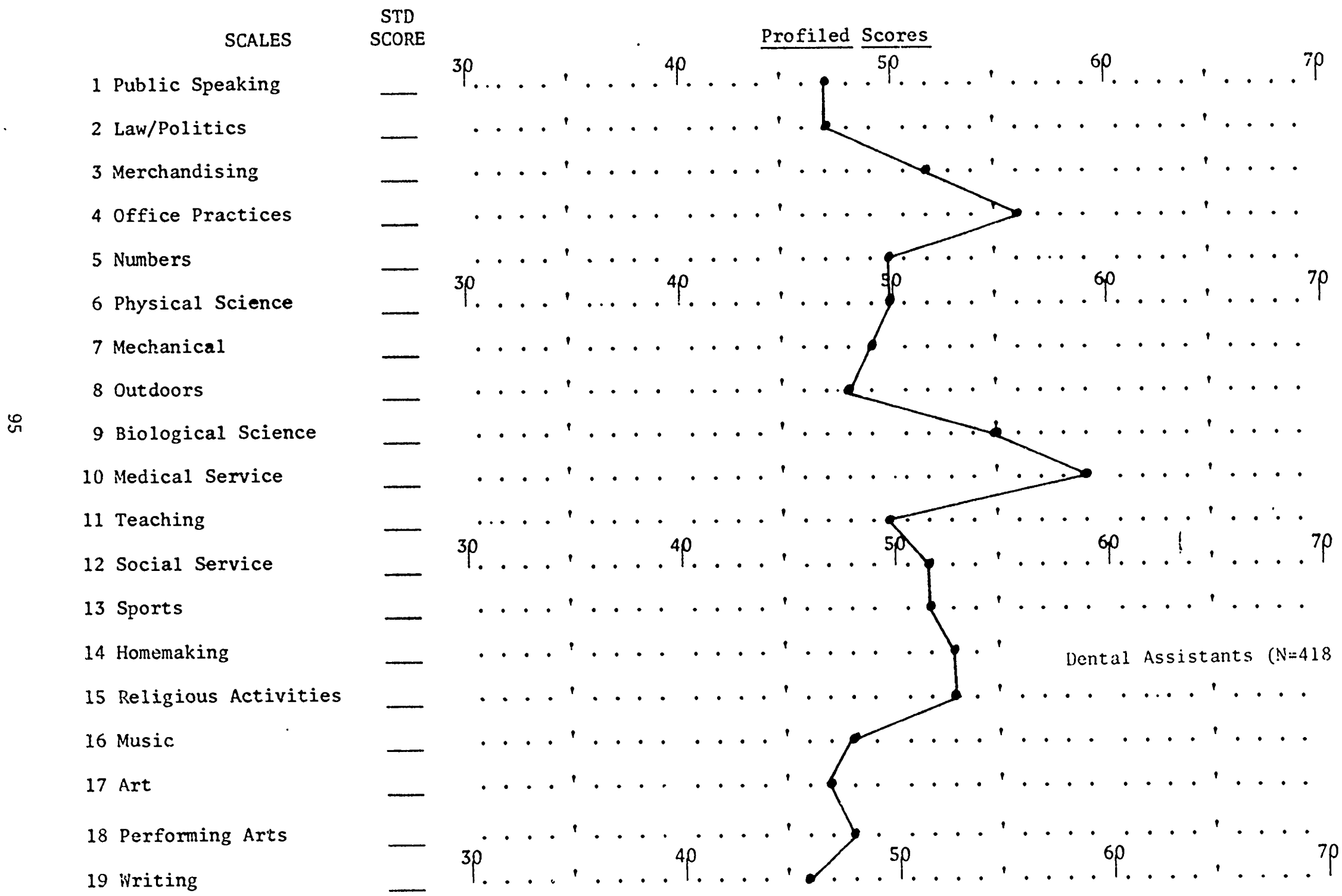
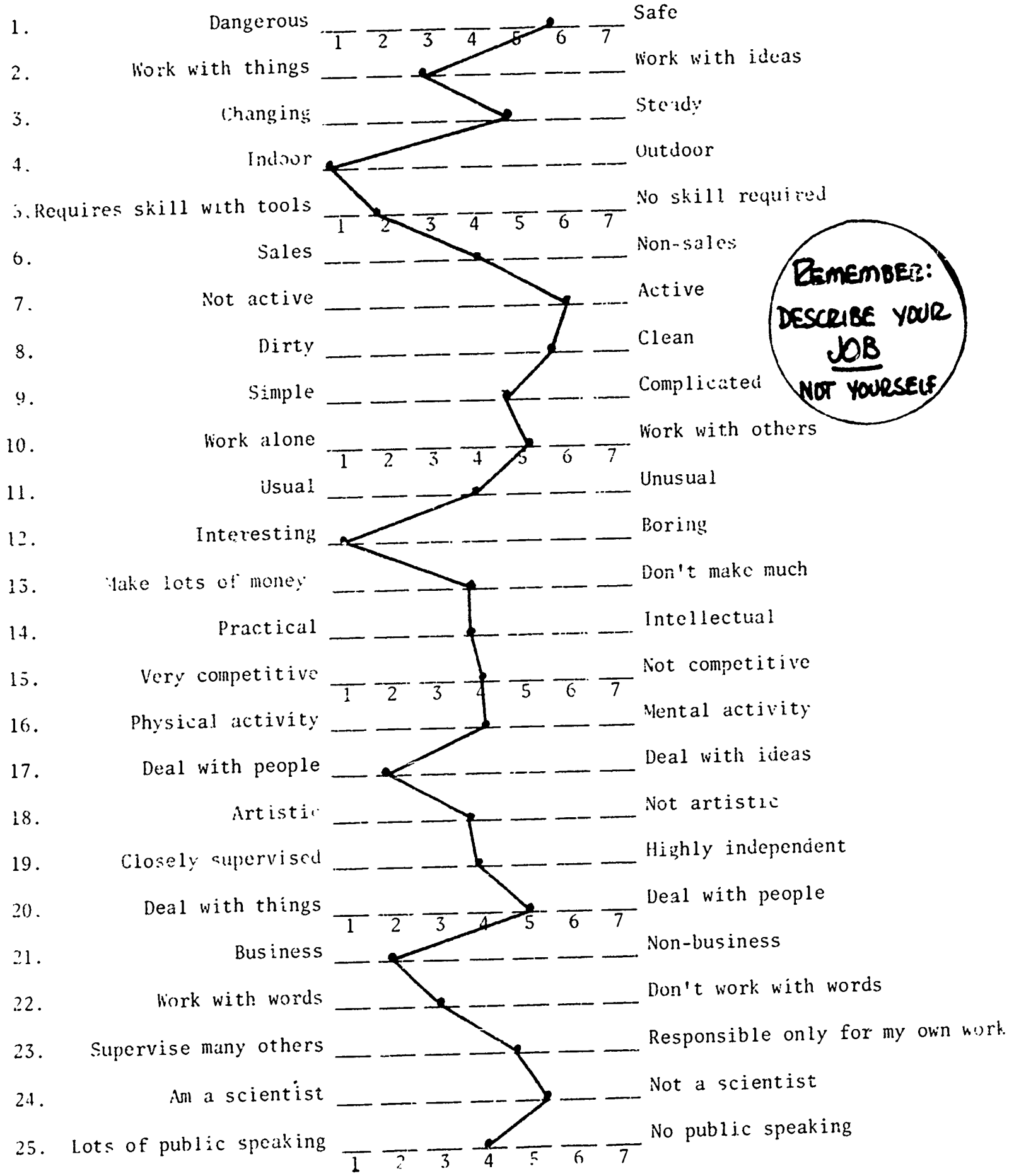


Figure 9

Job Description Checklist

Dental Assistants (N=418)



Chapter 8

The Elementary Teachers

Although the elementary teacher is not a nonprofessional worker, she has been an enigma in the measurement of vocational interests. The SVIB profile has for years included an Elementary Teacher scale, and it was usually clustered with the Office Worker, Steno-Secretary, and Housewife scales. High scores on these scales indicated an interest in typical feminine vocational behavior, that is, work as a short prelude to marriage, the same sort of vocational behavior which has been expected of women in nonprofessional occupations. The pattern of high scores on these scales has been the most frequent pattern found among 17-21 year old girls, and is known among counselors as the 'pre-marital pattern. Such interests have usually been considered as 'feminine, domestic' with some further implication that they were 'non-career' or 'nonprofessional.' For these reasons, we wanted to include elementary teachers among the occupations in this study.

Method

All of the 600 teachers in the sample were employed in Minnesota elementary schools in the year 1965-66 and had been certified for at least three years. The sample was drawn from two sources during the summer of 1966. A random sample of 250 teachers in Minneapolis elementary schools was drawn from the 1965-66 Minneapolis Public Schools directory; the additional 350 subjects were secured with the cooperation of the Minnesota State Department of Education. Towns with graded schools were divided into three categories according to the number of teachers employed and a proportion was computed for each category. Table 44 shows how the 315 subjects were distributed. Actual selection was of all the teachers in one school in a town that fell into one of the three categories. An attempt was made to represent the whole state geographically within any one category.

Ungraded school systems were represented in the sample by choosing five counties, well spread over the state, which employed relatively larger numbersof elementary teachers in ungraded schools than in graded schools. All the elementary teachers employed in ungraded elementary schools from Benton (N=5), Brown (N=4), Douglas (N=5), Otter Tail (N=14), and Wright (N=7) counties were included.

Thus various approaches were taken to include urban and rural elementary teachers, including those in ungraded schools, in adequate proportions.

The usual forms were sent to the subjects on July 5, 1966. Our timing was exquisitely poor, as summer is a bad time to try to contact elementary teachers. Only 33 percent had responded by August 2, when a follow-up letter and return postcard were sent out. Fifty-four percent response had been received by September 17 when a second follow-up letter

was mailed. Finally, completed materials were received from 374 (62 percent) while an additional 134 (22 percent) returned a postcard indicating that they did not wish to participate.

The final criterion group included 327 elementary teachers. Eighteen respondents were eliminated because they disliked their jobs, 25 because they had less than three years' experience, and four because their responses were too late for analysis.

Demographic Data

Table45 gives a description of the elementary teacher criterion group. The average elementary teacher was 44, married, with 16 years of formal education and 17 years of experience. Twenty-one percent of the sample listed a high school degree as their highest degree, 71 percent a bachelor's degree, and 8 percent listed Master's degree.

Results

Figure 10 shows the elementary teachers' average profile on the Occupational Scales. Even though many other occupations scored high on the Elementary Teacher scale, the elementary teachers did not score high on the scale for any other occupation, including scales for various types of teaching at the secondary level.

Figure 11 also shows the average Basic Scale profile of the elementary teachers. Their peak was on Teaching with no other exceptionally high scores, and no especially low scores.

Figure 12 gives the average job description of elementary teachers. They described their job as 'nonsales" more than any other group except licensed practical nurses, and as 'nonbusiness' more than any other group. They also described their job as "intellectual" and requiring 'working with words' more than any other group.

Items which differentiated between elementary teachers and WIG_{total} (see Appendix D) did not necessarily reflect intellectual or verbal activities; rather they reflected an interest in teaching, and activities for children. Items which suggest impulsive, dangerous activities were rejected by this group.

Conclusions

No apparent reason was found for the fact that many women and several seemingly unrelated occupational groups scored high on the Elementary Teacher scale. As was pointed out earlier, the high scoring occupational groups changed when the WIG group used in developing the scales was changed. They were no longer nonprofessional occupations but professional ones. This suggests that elementary teachers have common interests with

women in both professional and nonprofessional occupations and changing the reference point changes the set of similarities which are highlighted. Elementary teachers apparently fall near the middle of a continuum which represents occupational level. From either end this group seems far away and hard to distinguish from groups at the other end. This location may make it difficult to work with psychometrically; the woman whose interests are most difficult to differentiate meaningfully from others may not be the one at lower occupational levels but the one in the middle.

Table 44

Description of Sampling Procedures for Outstate Teachers in Graded Schools

N teachers employed per town	Total N Minnesota teachers in this category	Approximate Proportion	Sample Selected
1-29	5-6,000	.40	121
30-99	4-5,000	.33	102
100*	3-4,000	.27	92

*Twin Cities excluded

Table 45

Demographic Data for the Elementary Teacher Criterion Group (N=327)

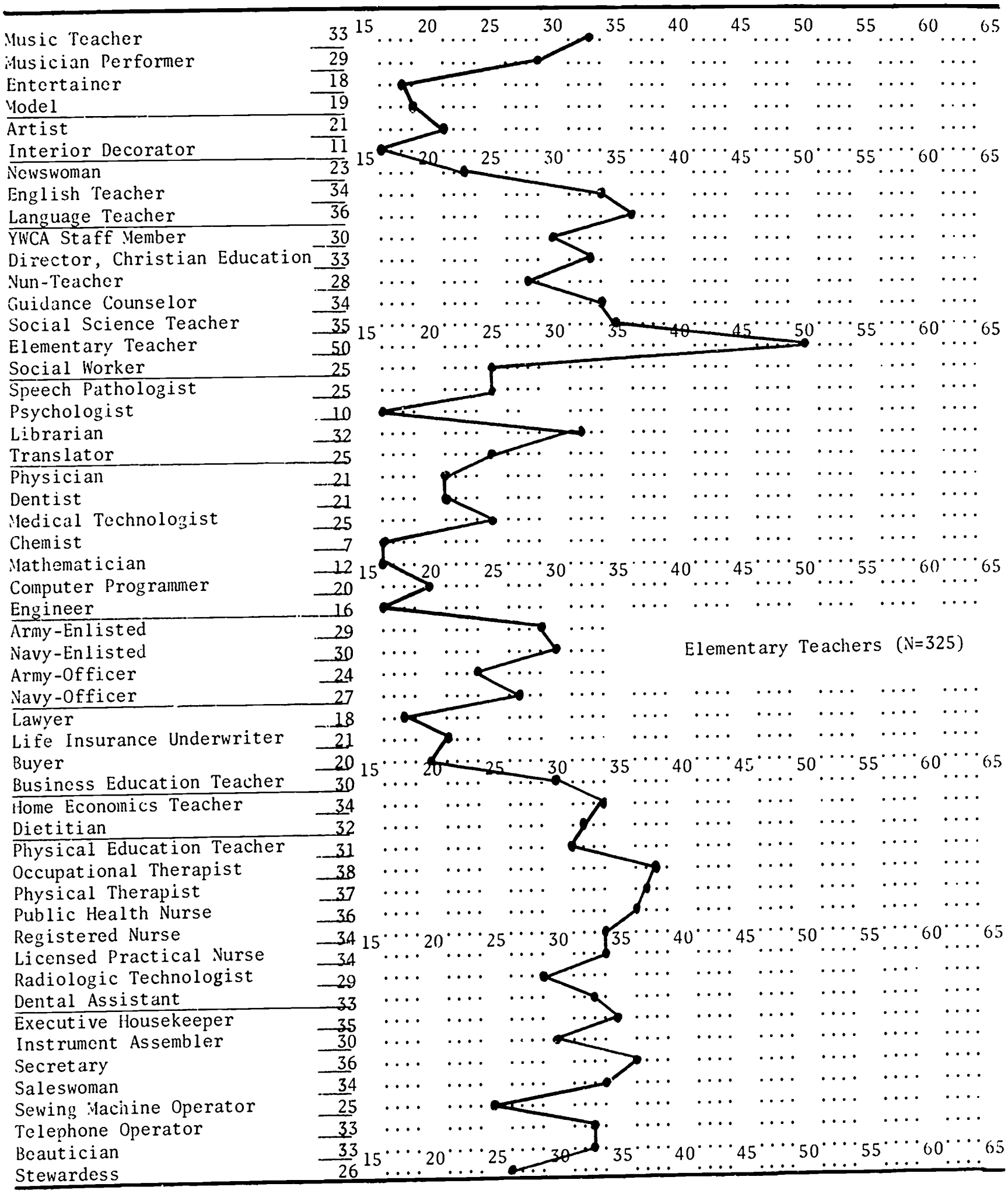
	Mean	SD	Range
Age (in years)	44	12.3	23-66
Education (years)	16	0.9	12-18
Experience (years)	17	10.7	3-44
Number of children (married subjects)	1.7	1.5	0-7

Marital status (in percent)

single	25
married	63
widowed	7
divorced	6

Figure 10

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women



Music Teacher	33
Musician Performer	29
Entertainer	18
Model	19
Artist	21
Interior Decorator	11
Newswoman	23
English Teacher	34
Language Teacher	36
YWCA Staff Member	30
Director, Christian Education	33
Nun-Teacher	28
Guidance Counselor	34
Social Science Teacher	35
Elementary Teacher	50
Social Worker	25
Speech Pathologist	25
Psychologist	10
Librarian	32
Translator	25
Physician	21
Dentist	21
Medical Technologist	25
Chemist	7
Mathematician	12
Computer Programmer	20
Engineer	16
Army-Enlisted	29
Navy-Enlisted	30
Army-Officer	24
Navy-Officer	27
Lawyer	18
Life Insurance Underwriter	21
Buyer	20
Business Education Teacher	30
Home Economics Teacher	34
Dietitian	32
Physical Education Teacher	31
Occupational Therapist	38
Physical Therapist	37
Public Health Nurse	36
Registered Nurse	34
Licensed Practical Nurse	34
Radiologic Technologist	29
Dental Assistant	33
Executive Housekeeper	35
Instrument Assembler	30
Secretary	36
Saleswoman	34
Sewing Machine Operator	25
Telephone Operator	33
Beautician	33
Stewardess	26

45
Academic Achievement

50
Femininity-Masculinity

Figure 11

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

SCALES	STD SCORE
1 Public Speaking	___
2 Law/Politics	___
3 Merchandising	___
4 Office Practices	___
5 Numbers	___
6 Physical Science	___
7 Mechanical	___
8 Outdoors	___
9 Biological Science	___
10 Medical Service	___
11 Teaching	___
12 Social Service	___
13 Sports	___
14 Homemaking	___
15 Religious Activities	___
16 Music	___
17 Art	___
18 Performing Arts	___
19 Writing	___

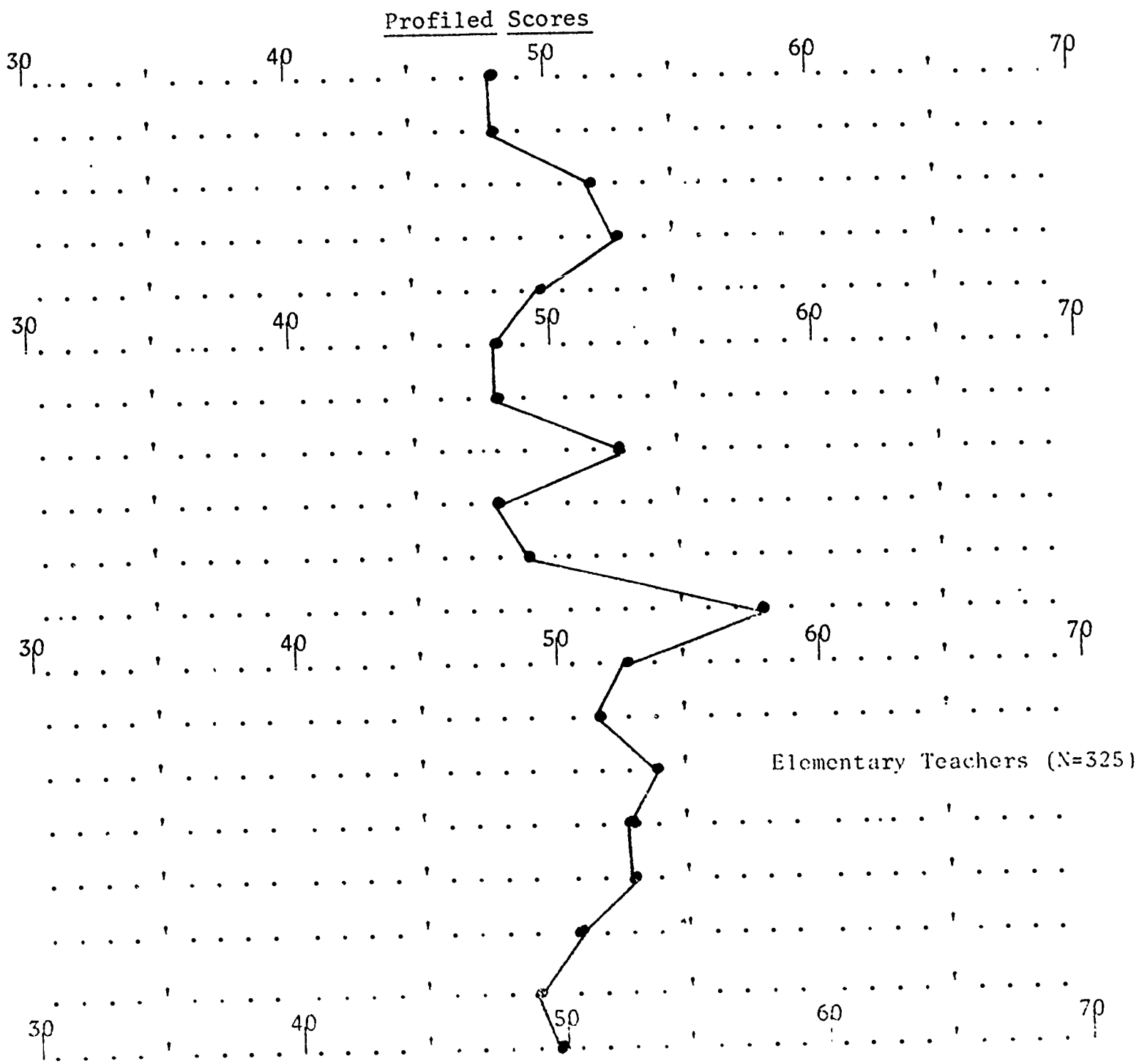
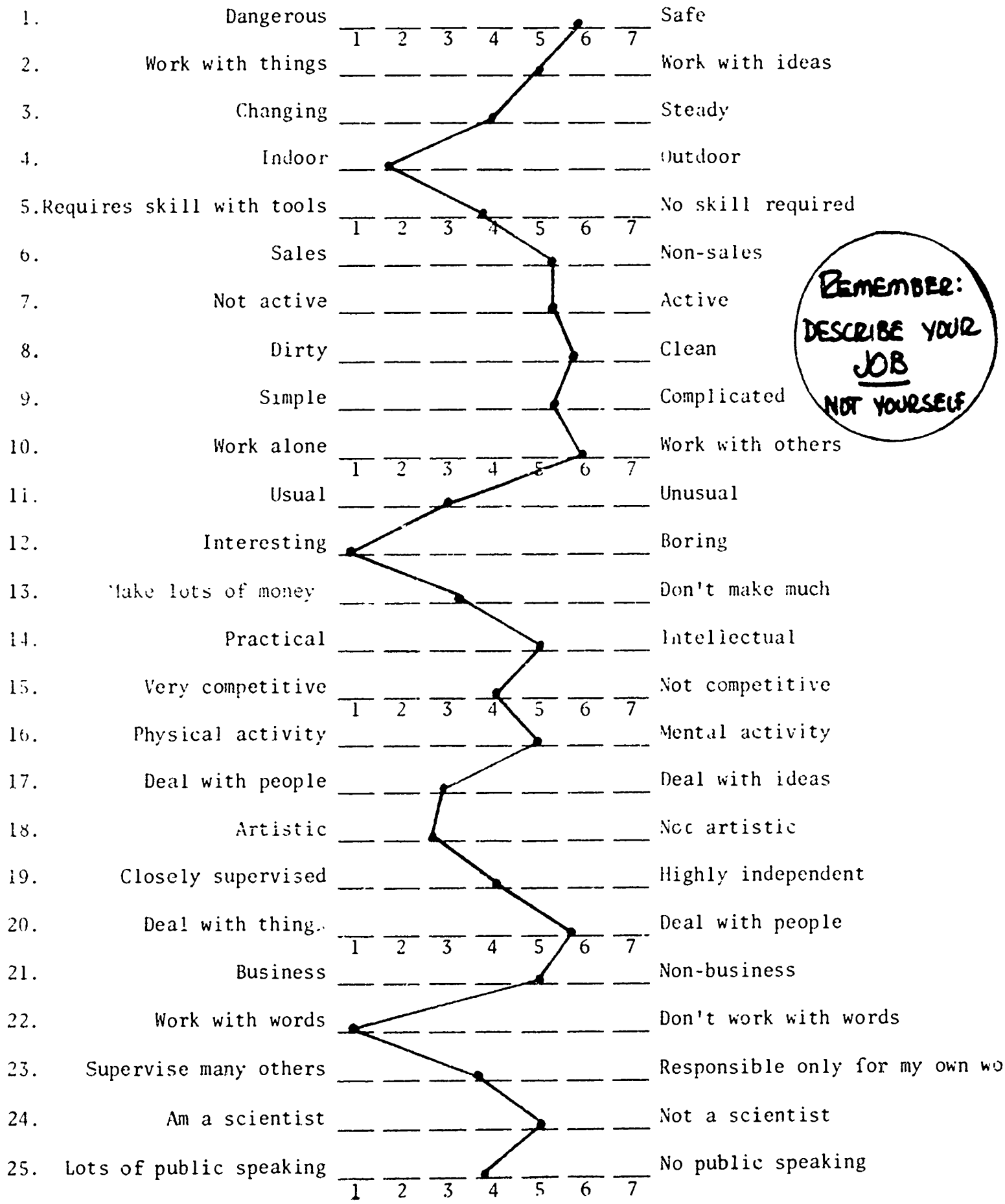


Figure 12

Job Description Checklist

Elementary Teachers (N=325)



Chapter 9

The Entertainers

An entertainer is a woman who makes her living by singing, dancing, acting as a comedienne, or whatever else is currently selling as entertainment. For this study our sample was limited to the popular performer whose occupational standing depends on a moderate amount of talent and training or experience, mixed with showmanship and fortuitous circumstances. Neither the Metropolitan opera stars nor the prima ballerinas were considered appropriate for the major focus of a study of essentially women who entered their occupation with minimum preparation. Instead the target population were those women who perform in restaurants, nightclubs, hotel bars, and supper clubs. The range of talent in our sample was from "adequate" to "outstanding."

This occupation was chosen for inclusion here for two reasons: first, because of the trend to affluence and increased leisure time, our society will probably support increasing numbers of popular entertainers and opportunities will increase for women with these talents; second, because these women clearly add some diversity to the occupational coverage of this project. They are not like clerical workers, not paramedical, not social service oriented--they are a very different group of women.

In addition, of course, these women are inherently interesting; a quick scan of any newsstand headlines demonstrates that.

Method

Collecting a sample of performers was not easy and could not be done in the usual way. Those professional organizations which might have been able to provide names and addresses were reluctant to do this, and we found no possible sources of large numbers of names and addresses of women in this occupation. This is not surprising--these people are continually in the public eye, and need to protect their privacy as best they can.

To secure a sample, we turned to other sources, such as listings of acts in Variety, the New Yorker magazine, newspapers and the various brochures furnished by cities which indicate "What to do in our city this week." Performers who were listed in such locations were singled out and used for the sample here.

As these women are quite mobile, we sent out requests every week--to the current location of their act--from the fall of 1966 through the summer of 1967. The letters were addressed directly to the nightclub or theater where the entertainer was currently playing. Because of the short tenure of most of these acts, there was no systematic follow-up and the percent return reflects the trouble with the mail and lack of follow-ups.

Five hundred and seventy-five requests were sent and 128 (22 percent) returns were received; 24 were discarded because of lack of experience or because they did not like their work. The final criterion group contained 104 women performers, some quite well known and some quite obscure, who worked mainly in nightclubs, theaters, and on television.

Demographic Data

Less demographic data are available on this group than most others because they received only the SVIB and not the questionnaire. Table 46 gives a description of the criterion group. The average entertainer in this group was 34 years old and had 13 years of experience. The most common level of education was a high school degree but 26 percent had college degrees and one had a master's degree. About five percent have non-college training in business or paramedical fields.

The geographic areas from which the respondents came suggests that our criterion group probably under-represents the West Coast film oriented entertainer and that Midwestern entertainers are over-represented either because of our sampling techniques or because of selective response on the part of those who received requests to participate.

Results

Figure 13 shows the average SVIB profile for the entertainers on the Occupational Scales. They scored A only on their own scale but scored B+ on the Musician Performer and Model scales, which are related fields for many of them. They had medium level scores on aesthetic and verbally oriented scales like Artist, Newswoman, English Teacher and Language Teacher, and tended to score low on scientific, medical, business and social service scales.

On the Basic Scales, they scored highest on Performing Arts and Music, with scores on Art, Writing, and Public Speaking also somewhat higher than most.

Items which differentiated entertainers from WIG_{total} are shown in Appendix D. In general, entertainers endorsed items having to do with art, music, and any kind of public performance, and rejected items concerning routine clerical tasks and helping others.

Conclusions

Entertainers prefer to be the center of attraction. They are interested in art and music but not in other typically feminine areas, such as social service, and homemaking. While it is as easy to differentiate their interests as those of any other group studied, the relationship between talent and interest needs to be investigated before much practical use can be made of these findings.

Table 46

Demographic Data for the Entertainer Criterion Group (N=104)

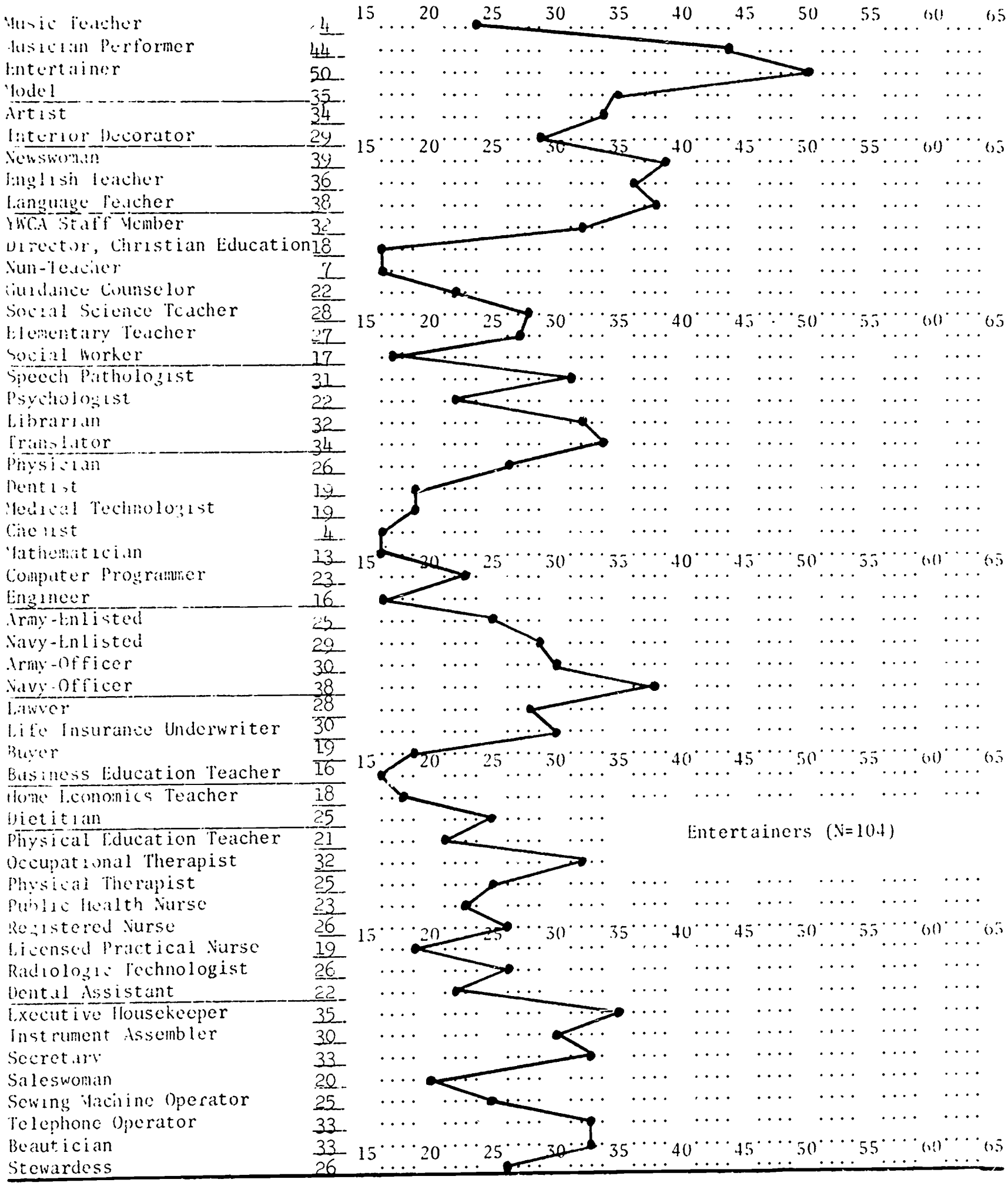
	Mean	SD	Range
Age (years)	34	9.7	19-61
Education (years)	14	2.3	6-20
Experience (years)	13	8.9	3-40

Geographical Location (in percent)

New England	1
East	28
South	10
Southwest	12
Midwest	28
Northwest	1
California	19

Figure 13

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women



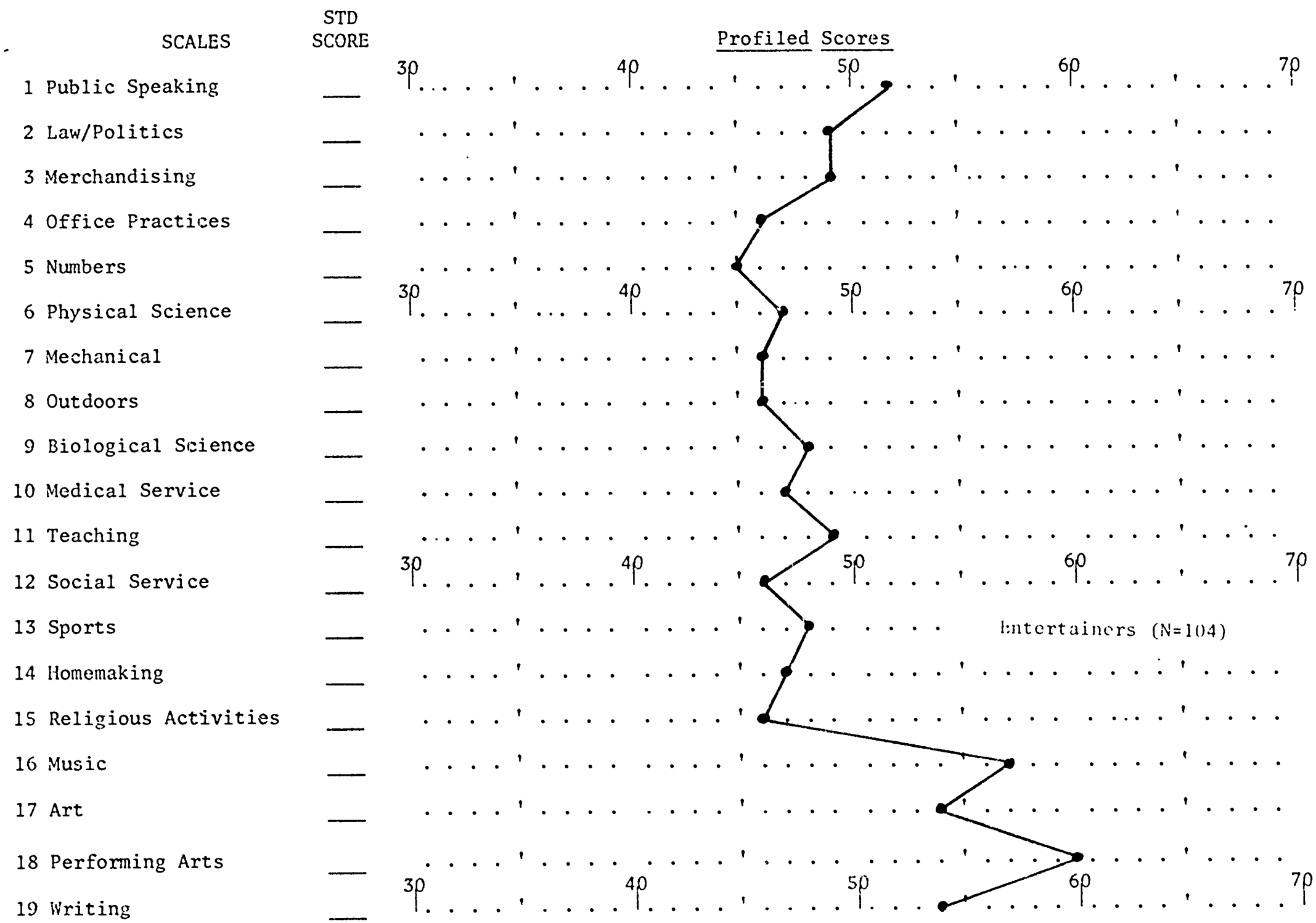
45
Academic Achievement

50
Femininity-Masculinity

Figure 14

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN



Chapter 10

The Executive Housekeepers

Executive housekeepers work in hotels, hospitals, clubs, and dormitories. They are charged with keeping their places of employment clean and attractive, a relatively simple sounding requirement unless that place of employment happens to be a 500 bed hospital or 1000 room hotel. The job may include hiring and supervising a large number of workers, preparing budgets and making purchases, as well as supervising the cleaning, laundry, linen, decorating, and repair functions involved in a large hospital or hotel.

These positions are often filled by promotion from within. Recently, however, some colleges have begun to offer classes and short courses in cooperation with the National Executive Housekeepers Association so specialized education will probably play an increasingly important role in the selection of executive housekeepers (U.S. Dept. of Labor,1966b). The executive housekeepers are one of the few occupations studied in which women have considerable administrative authority. While opportunities for employment are not as good as in some other women's occupations, executive housekeeping is an administrative field which women can enter with a minimum of formal training. Because of the expanding number of institutions employing these women, future opportunities look good.

Method

The National Executive Housekeepers Association provided a list of their approximately 2,300 members, from this, a random sample of 606 members was chosen. In August, 1967, these women were mailed the forms for this study. About two weeks later those who had not responded were sent a follow-up reminder.

By December, 301 (50 percent) had returned completed SVIBs and questionnaires. The final criterion group included 281 executive housekeepers; 19 women did not meet the standards of being currently employed and having three years' experience, one did not like her work.

Table 47 describes the criterion group. The average executive housekeeper was 53 years old, married, with two children. She had a high school diploma and 10 years of experience in her occupation. The average does not, of course, describe the whole group. For instance, 7 percent of the group have BA degrees and 2 percent have MA degrees.

In response to a list of possible reasons for entering executive housekeeping, from which the women could check any which applied to them, the highest percentage of the executive housekeepers, 87 percent, checked "I enjoy the work," and the lowest percentage, 27 percent, checked "It was the best paid job available when I needed a job." These data

suggest that the actual job activities were more important to executive housekeepers than pay in entering the field. This pattern was found for most occupations studied here, except the instrument assembler and sewing machine operator samples.

Results

Figure 10 contains the average profile for executive housekeepers on the SVIB Occupational Scales. They did not score high (A) on any other scales, but had moderately high (B+) averages on the Saleswoman, Dietitian, Licensed Practical Nurse, Dental Assistant, and Elementary Teacher scales. They probably share a willingness to take responsibility for institutional management with the Dietitians, but it is difficult to see any similarities between executive housekeepers and elementary teachers except on the homemaking dimension itself.

On the Basic Scales, their highest score was on the Homemaking scale and they scored higher on it than any other group studied here though dietitians and home economics teachers from another study scored higher. Their other high scores were on the Merchandising, Office Practices, and Religious Activities scales. The first two seem quite consistent with the Occupational Scales. There were no particularly low Basic Scale scores.

Figure 17 shows how executive housekeepers rated their jobs. The most outstanding rating was on the "Supervision" dimension where they said they supervised others much more than any of the other nonprofessional groups.

The items which differentiated executive housekeepers from WIG_{total} are in Appendix D. While they were varied, there was a core of items having to do with organizing tasks and people.

Conclusions

The vocational interests of executive housekeepers can be readily distinguished from those of women in other nonprofessional occupations, and their most notable pattern is the combination of typical homemaking interests with a preference for supervision and organization.

Table 47

Demographic Data for the Executive Housekeeper Criterion Group
(N=281)

	Mean	SD	Range
Age (years)	53	6.8	34-73
Formal education (years)	12	1.9	6-19
Experience (years)	10	6.0	3-30
Number of children (married subjects)	2	1.7	

Marital status (in percent):

single	8
married	54
widowed	21
divorced	16

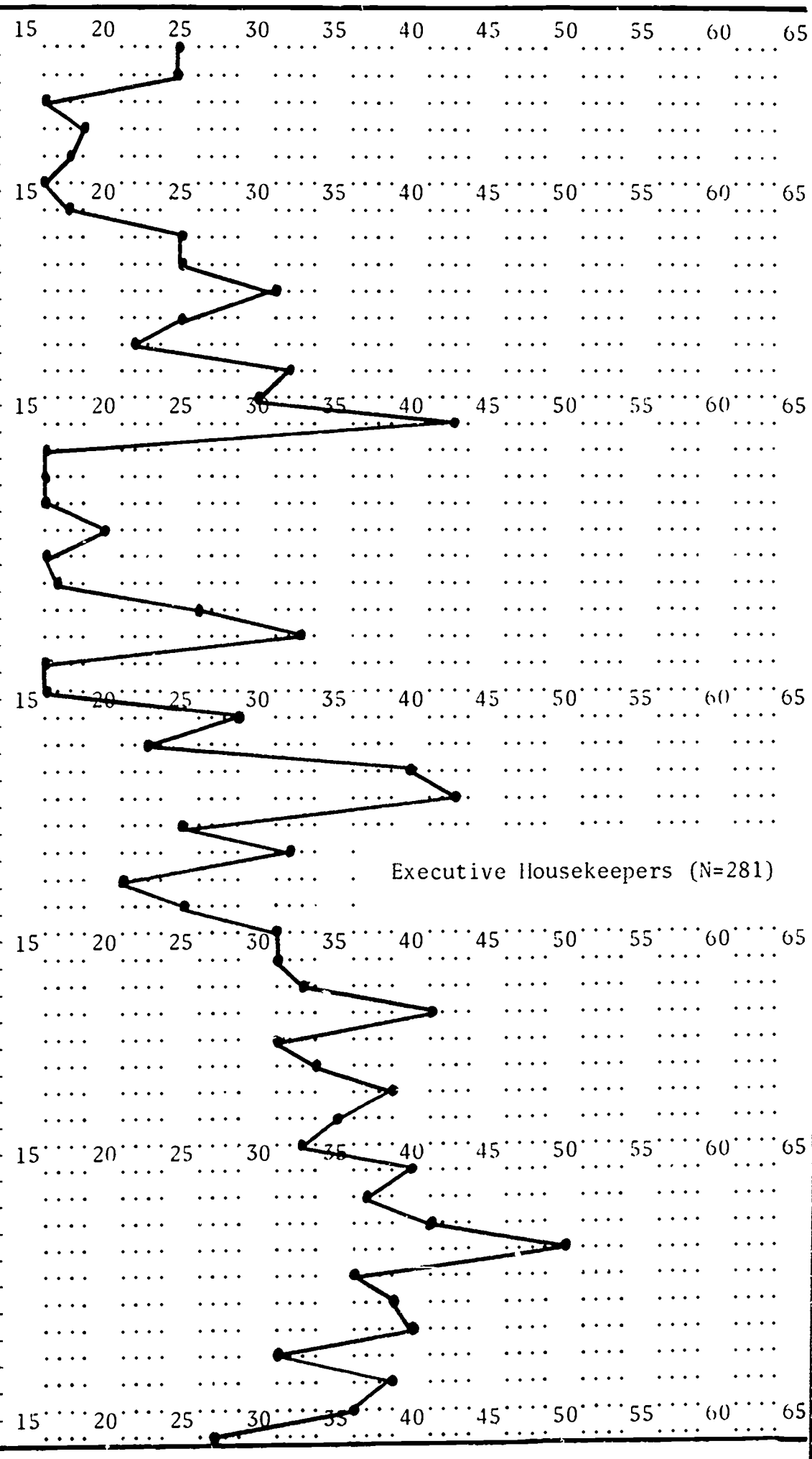
Geographical Location (in percent)

New England	2
East	11
South	27
Southwest	7
Midwest	32
Northwest	4
California	17

Figure 15

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	25
Musician Performer	25
Entertainer	16
Model	19
Artist	18
Interior Decorator	13
Newswoman	18
English Teacher	25
Language Teacher	25
YWCA Staff Member	31
Director, Christian Education	25
Nun-Teacher	22
Guidance Counselor	32
Social Science Teacher	30
Elementary Teacher	43
Social Worker	16
Speech Pathologist	13
Psychologist	3
Librarian	20
Translator	16
Physician	17
Dentist	26
Medical Technologist	33
Chemist	4
Mathematician	9
Computer Programmer	29
Engineer	23
Army-Enlisted	40
Navy-Enlisted	43
Army-Officer	25
Navy-Officer	32
Lawyer	21
Life Insurance Underwriter	25
Buyer	31
Business Education Teacher	31
Home Economics Teacher	33
Dietitian	41
Physical Education Teacher	31
Occupational Therapist	34
Physical Therapist	39
Public Health Nurse	35
Registered Nurse	33
Licensed Practical Nurse	40
Radiologic Technologist	37
Dental Assistant	41
Executive Housekeeper	50
Instrument Assembler	36
Secretary	39
Saleswoman	40
Sewing Machine Operator	31
Telephone Operator	39
Beautician	36
Stewardess	27



43
Academic Achievement

44
Femininity-Masculinity

Figure 16

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

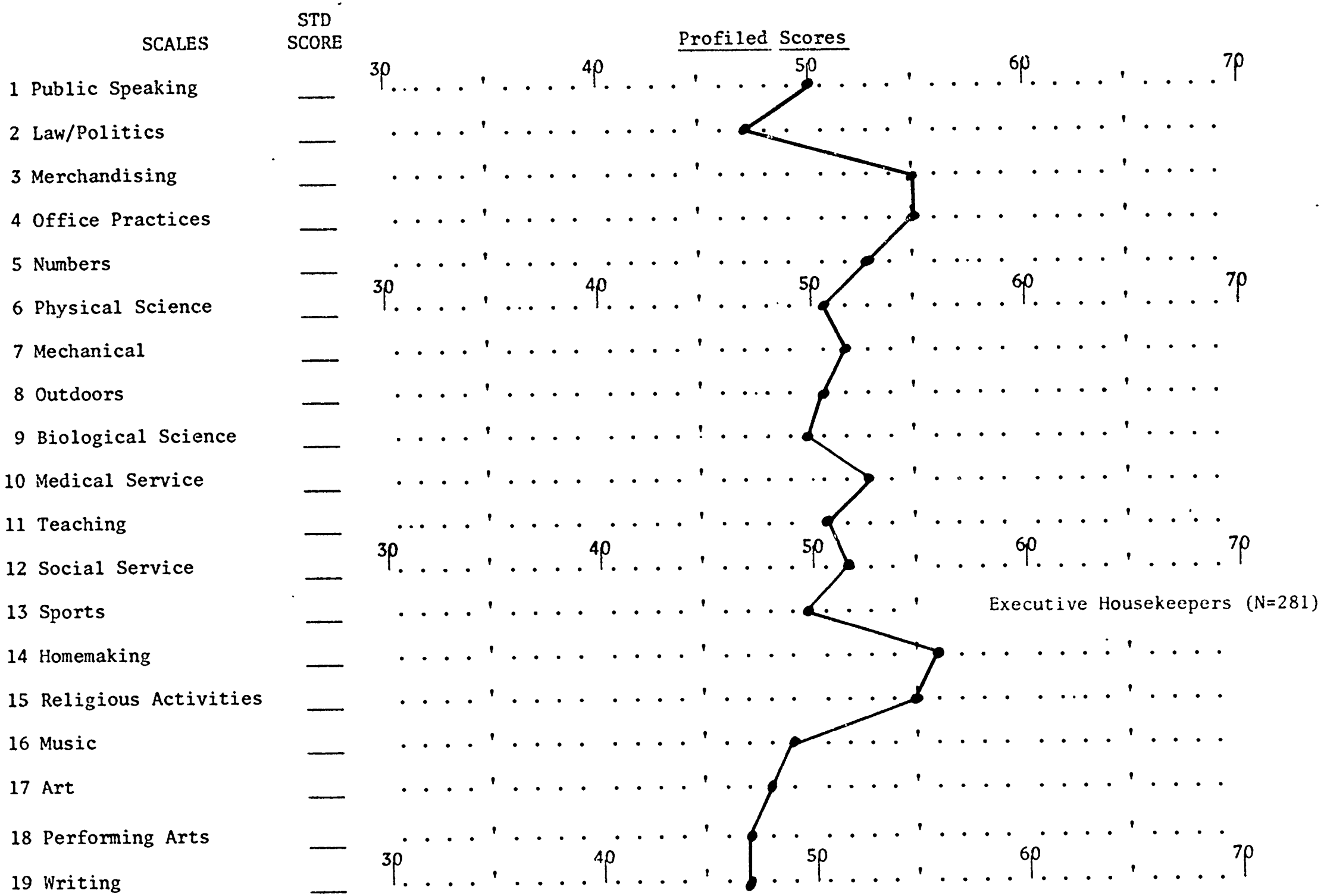
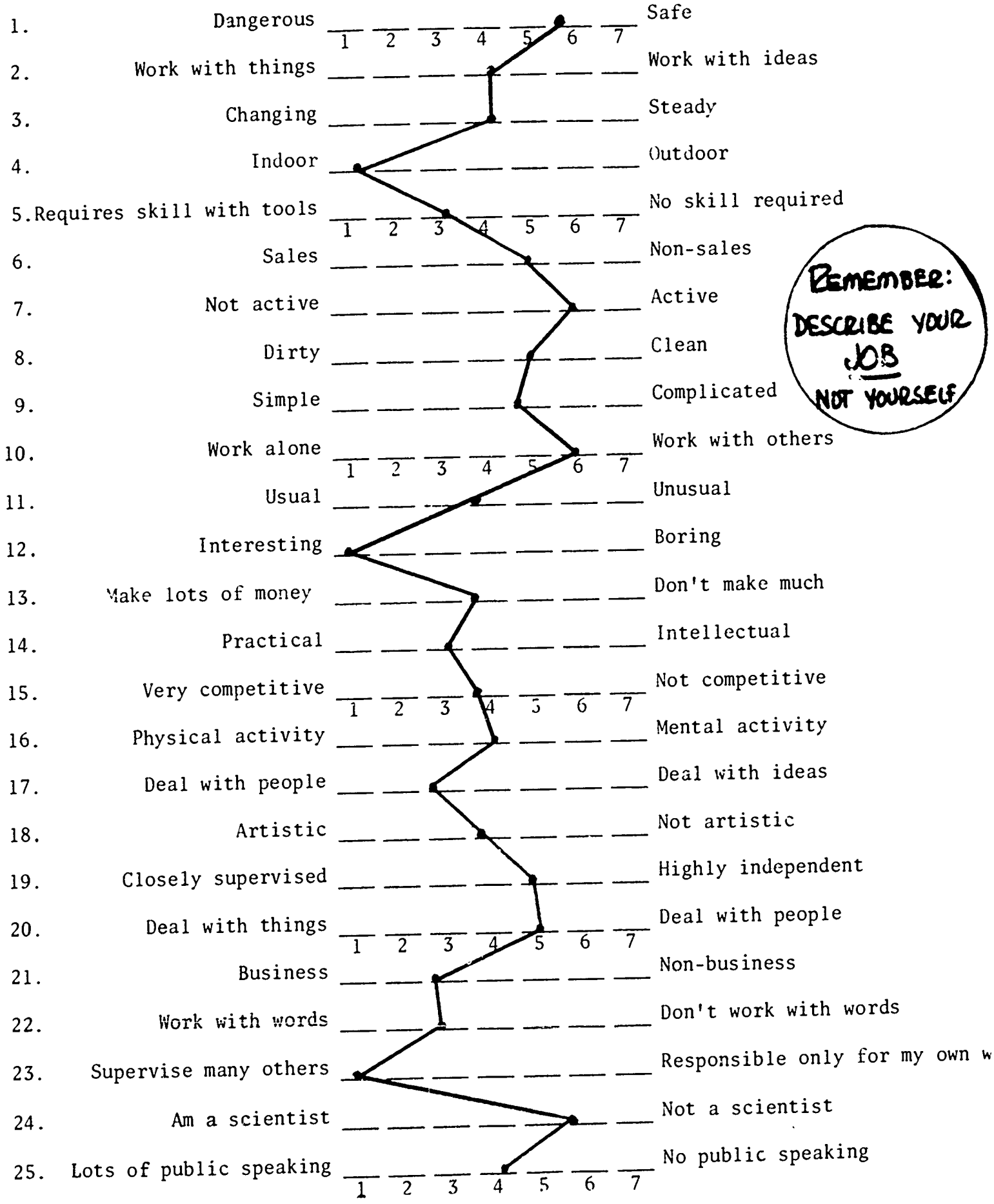


Figure 17

Job Description Checklist

Executive Housekeepers (N=281)



Chapter 11

The Instrument Assemblers

In general, assemblers are semi-skilled workers who put together parts or finished products of industry. Most of the women employed in the field (40 percent of the half million assemblers employed) are bench assemblers who put together small parts as opposed to floor assemblers who put together large heavy equipment. Job duties, tools used, and skills required vary with the industry and product with which the assembler is involved. The assembler is usually trained on the job. A high school education is not usually required but some mechanical aptitude and physical stamina are.

The target population here also included inspectors; these work in the same industries as assemblers do, automotive, aircraft, and electrical equipment and machinery, and the inspectors frequently come from the ranks of assemblers. They test mass produced items to insure the integrity of the product. They may inspect visually or use a variety of measuring devices. They keep records of rejections for use in eliminating errors. The job duties, and tools used vary for inspectors as for assemblers with the product and industry. Women inspectors are usually employed where small light products or soft goods are produced. Most inspectors at the semi-skilled level are trained on the job. High school graduation or experience in assembly-line work may be required (U. S. Dept. of Labor, 1966b).

These occupations are interesting ones to study from two points of view. First because the vocational interests of women in semi-skilled, blue-collar occupations have never been studied before. Second, because the vocational interests of women in occupations where mechanical aptitude and manual dexterity are so important have never been studied before either. As there is obviously room for women in these occupations, psychologists should know something of the demands and rewards of these occupations, just as they study higher level occupations such as nursing or teaching.

Method

The subjects were all employees of one large Twin Cities industrial firm which chose to remain anonymous. The company is large enough to have a well defined job classification scheme, so they were able to provide the names and addresses of 217 inspectors and 659 assemblers who were currently employed by their company. These lists did not represent random samples but rather were the total populations from the various installations involved.

The initial mailings went to 217 inspectors and 344 assemblers late in September of 1966. The usual forms were sent, along with a mimeographed cover letter explaining the project. Usually, this letter

included a promise to return the individual's results to her, but the company involved specifically requested that this data not be returned. While no reason was given, it appears that they were concerned with job turnover, and were afraid that the SVIB results might prompt some women to seek employment closer to their interests. This decision not to return the results probably hurt our rate of response considerably.

In mid-November follow-up reminders were sent to those who had not mailed in the SVIB and questionnaire. By January, 84 of the inspectors (39 percent) and 99 of the assemblers (29 percent) had returned the SVIB. Unfortunately, after removing those who had not had three years of experience and those who did not like their jobs, the number who could be included in the criterion groups were 55 inspectors and 34 assemblers. The sample of assemblers might have been doubled by using the other half of the list provided but since the first mailing to assemblers had yielded only 10 percent useable replies, the additional expense was not justified. Instead the inspectors and assemblers were combined to make a criterion group of 89 from which a scale for instrument assemblers was developed. When the criterion group is small, there is the danger that the scale may not be as valid as one based on a larger group (Strong, 1955), but we proceeded on the supposition that some scale is better than none (Harmon, 1968).

The rate of response for this occupation was lower than most of the other groups; at least four factors were involved:

> First, the educational level was relatively low and this factor is usually associated with response rate.
>
> Second, the company and union had just completed a messy round of contract negotiations, and feelings of suspicion were high; a mailing under company sanction may have been viewed with some skepticism.
>
> Third, we were denied the opportunity to offer to return the individual's results, which we know is helpful in soliciting cooperation.
>
> Fourth, the timing of our follow-up was too late. During the project, we tried various follow-up lags, and eventually decided that 3-10 days is the best interval, as opposed to the several week lag used here.

Again, the policy was followed here of stressing sample purity over sample size; thus, the 89 women in the criterion group were all women with at least three years of experience, who said they enjoyed their work. No index of job performance was available.

Description of the Criterion Group

Table 48 contains the demographic information for the instrument assemblers. The typical assembler-inspector was 45 years old, married, with two children. She had a high school education and 14 years of experience in her work. All of these women were Minnesota residents employed by one company. When asked to indicate their reasons for choosing their job, 76 percent indicated that it was the best paying job available when they were looking for work, and 65 percent said they would not work if they didn't need the income. Only 57 percent of the group expressed an enjoyment of the work as one of their reasons for being employed in the field, a much lower percentage than found in other groups, e.g., beauticians=94 percent, executive housekeepers=87 percent, saleswomen=85 percent, and sewing machine operators=70 percent. This finding may be a result of the sampling technique used and merely represents discontent with one type of assembling in one particular firm. Still, it appears that this kind of occupational activity is not appealing to very many women.

It is interesting to note that seven percent of these women had degrees from business schools and had apparently chosen factory work over white collar secretarial jobs.

Results

Figure 18 shows the average SVIB profile for the criterion group. Besides their own scale, inspectors and assemblers scored highest on the Secretary, Army-Enlisted, Telephone Operator and Beautician scales, and lowest on the Interior Decorator, Psychologist, Mathematician and Chemist scales.

On the Basic Scales, one of their highest scores was on the Mechanical scale although they scored just as high on the Office Practices scale. Like many of the other nonprofessional groups, instrument assemblers scored quite low on Public Speaking and Writing.

Figure 12 shows how these women described their jobs. They reported that their jobs involved dealing with things rather than ideas more than any other group except sewing machine operators. While all of the groups described their jobs as relatively clean, instrument assemblers reported the dirtiest working conditions. They described their jobs as less artistic and less scientific than any other group did. That their jobs involve very little public speaking corroborates the evidence from the SVIB that these women do not have verbal interests.

Appendix D shows which items differentiated between the instrument assemblers and Women-in-General. The mechanical and clerical aspects of their interests show up in items like operating machinery, repairing electrical wiring, and operating office machines. Conversely,

they rejected items having to do with speaking, writing, and handling people.

Conclusions

Instrument assemblers have a greater interest in mechanical activities than most of the other groups studied and milder interests in clerical activities. There are certainly some similarities between the precision and attention to detail of a good office worker and a good assembler. Why should these women choose mechanical work over clerical work? One clue is that their main reason for entering their jobs was financial, with intrinsic satisfactions weighing less heavily on the decision. In addition, their aversion to verbal activities may make them more at home in the factory than the office.

The generality of these findings may be limited because of the restricted nature and size of the sample. Still, we believe that the observed validity approximates the true validity for this scale, though a somewhat better scale may have been obtained with more subjects from a variety of firms.

Table 48

Demographic Data for the Instrument Assembler Criterion Group (N=89)

	Mean	SD	Range
Age (years)	45	7.0	25-53
Formal education (years)	11	1.5	8-16
Experience (years)	14	6.3	3-32
Number of children (married subjects)	2	1.6	0-7

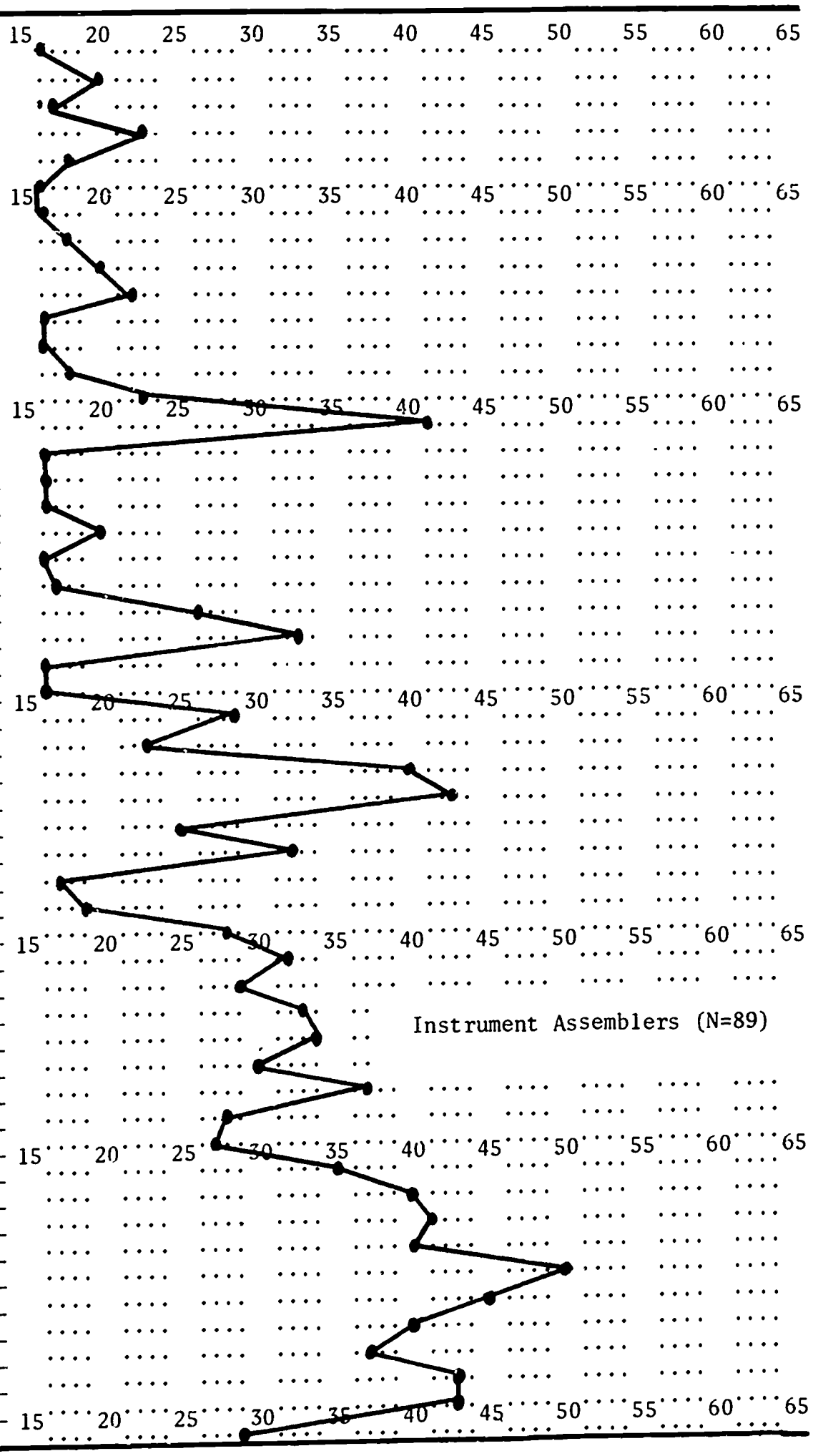
Marital Status (in percent):

Single	3
Married	78
Widowed	1
Divorced	13

Figure 18

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	16
Musician Performer	20
Entertainer	17
Model	23
Artist	18
Interior Decorator	8
Newswoman	16
English Teacher	18
Language Teacher	20
YWCA Staff Member	22
Director, Christian Education	12
Nun-Teacher	15
Guidance Counselor	18
Social Science Teacher	23
Elementary Teacher	41
Social Worker	16
Speech Pathologist	13
Psychologist	3
Librarian	20
Translator	16
Physician	17
Dentist	26
Medical Technologist	33
Chemist	4
Mathematician	9
Computer Programmer	29
Engineer	23
Army-Enlisted	40
Navy-Enlisted	43
Army-Officer	25
Navy-Officer	32
Lawyer	17
Life Insurance Underwriter	19
Buyer	28
Business Education Teacher	32
Home Economics Teacher	29
Dietitian	33
Physical Education Teacher	34
Occupational Therapist	30
Physical Therapist	37
Public Health Nurse	28
Registered Nurse	27
Licensed Practical Nurse	35
Radiologic Technologist	40
Dental Assistant	41
Executive Housekeeper	40
Instrument Assembler	50
Secretary	45
Saleswoman	40
Sewing Machine Operator	37
Telephone Operator	43
Beautician	43
Stewardess	29



37
Academic Achievement

37
Femininity-Masculinity

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

SCALES	STD SCORE
1 Public Speaking	___
2 Law/Politics	___
3 Merchandising	___
4 Office Practices	___
5 Numbers	___
6 Physical Science	___
7 Mechanical	___
8 Outdoors	___
9 Biological Science	___
10 Medical Service	___
11 Teaching	___
12 Social Service	___
13 Sports	___
14 Homemaking	___
15 Religious Activities	___
16 Music	___
17 Art	___
18 Performing Arts	___
19 Writing	___

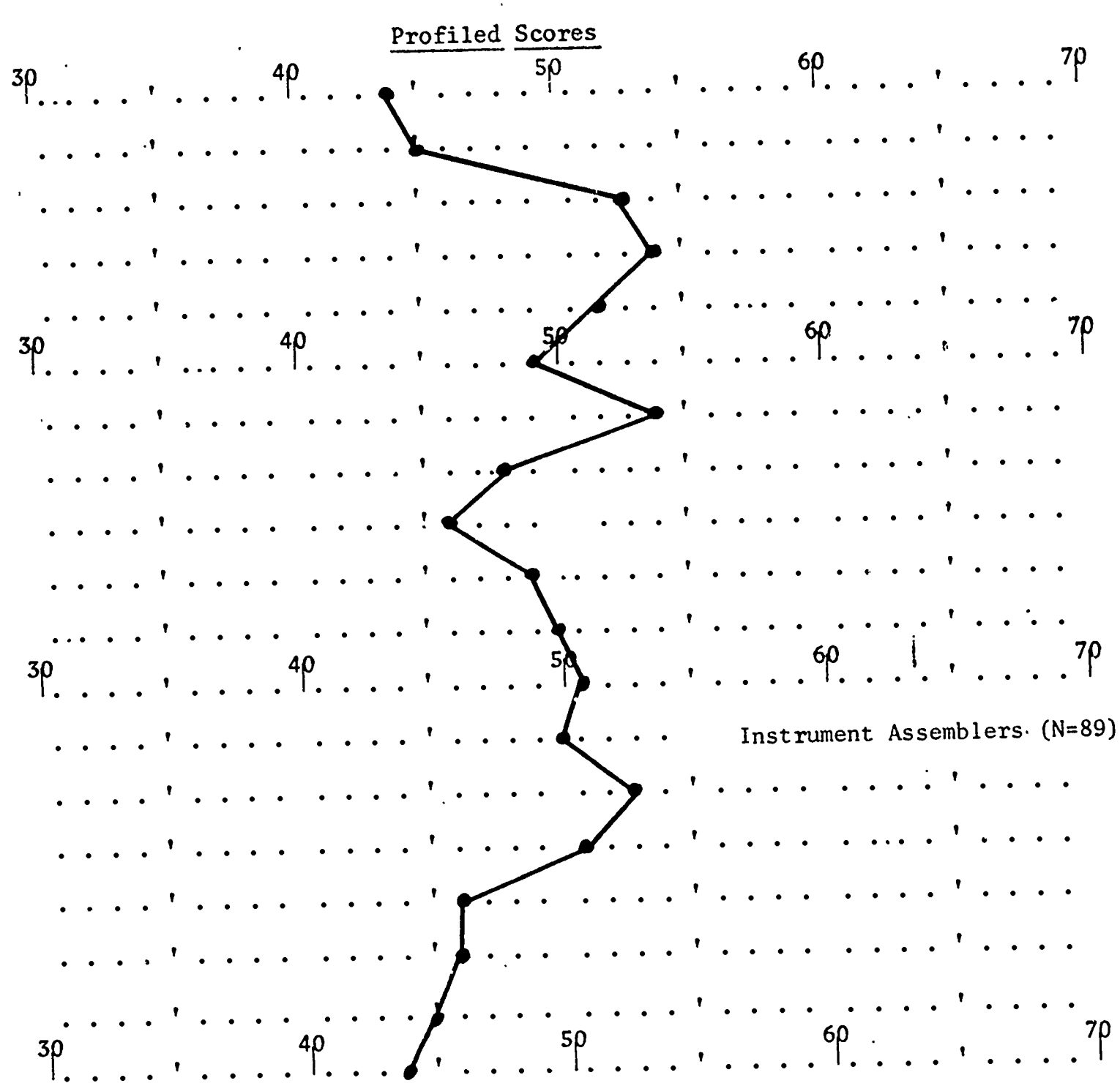
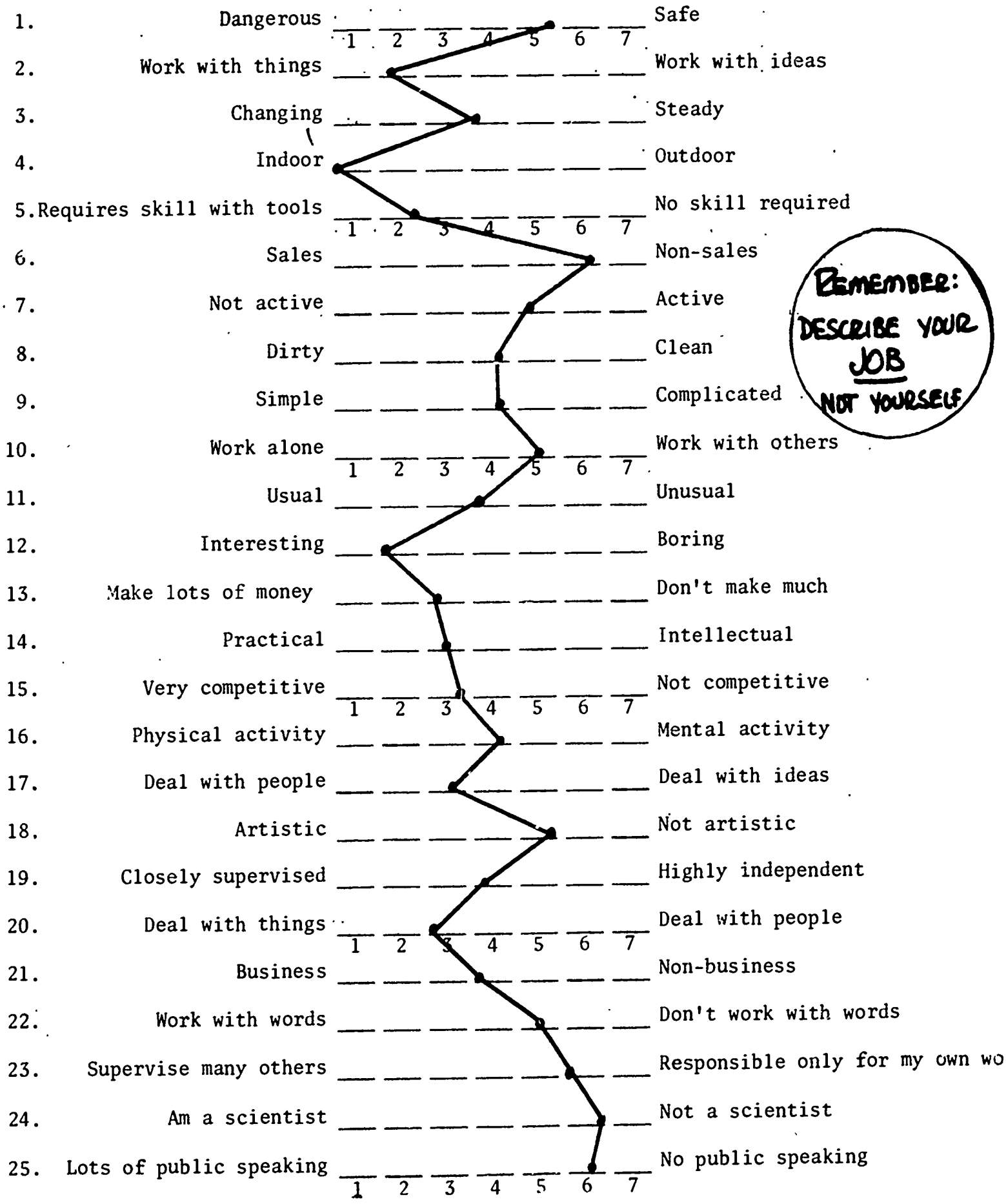


Figure 20

Job Description Checklist

Instrument Assemblers (N=89)



Chapter 12

The Interior Decorators

Interior decorators and designers plan the use of space, and help select furnishings for all types of interiors--residences, businesses, institutions, even aircraft. The interior designer may work with an architect to plan the total interior of a building, while the interior decorator concentrates more heavily on the selection of furniture, draperies, carpets, and other decorative items. Either the decorator or designer may work for herself, a decorating firm, or for a large department or furniture store. She is usually in an urban population center, and her clients may be an individual, a family, or a business firm. She may draw up floor plans and make sketches, estimate costs, order furniture and arrange for services and installations, evening and weekend hours are common, especially in decorating residences.

Many of the interior decorators and designers currently employed entered the field with little training beyond high school but today the trend is toward specialized training in an art school or college of fine arts. Students study design, art history, drawing and painting, architecture, furniture, and materials (U.S. Dept. of Labor, 1966b).

Membership in the American Institute of Interior Designers (AID) is granted to designers with sufficient experience and training. The educational and experience requirements for active membership vary from four years of college with a major in interior design plus four years of experience to high school graduation plus ten years of experience.

The occupation was included here because it is primarily artistic and can be entered without traditional college training. In addition it is one of very few fields in which one finds women in business for themselves, and it is one of the few fields where men and women are treated equally in compensation.

Method

The sample included 500 members of the American Institute of Design. They were selected randomly from among active members listed in the AID directory. The directory is arranged geographically so the sample represents the geographical composition of the membership.

In July of 1966, those selected for the sample were sent a request to cooperate in the study of vocational interests of interior designers. About three weeks later follow-up reminders were sent to non-respondents. A second follow-up reminder, a contempory type card, was sent just before Christmas in 1966. It was not very effective in encouraging participation, perhaps because of the time of year.

By February, 1967, 135 women AID members (37 percent of the sample) had completed the SVIB and questionnaire. Another 23 percent of the sample responded by returning a postcard saying they did not wish to participate or were too busy at the time. Both this high rate of return of postcards pleading time pressures, and informal interviews with interior decorators vividly verified that these women have very full schedules, probably the most harried of all the groups studied. The low rate of response among this group was undoubtedly due to their full schedules.

The criterion group finally included 178 AID members (six were excluded because they expressed reservations about their occupational choice and one was excluded because she had less than three years of experience).

Demographic Data

Table 49 describes the criterion group. The average interior decorator was 52 years old, married, with one child. She had a high school degree and some additional training and, on the average, had 22 years' experience. She lived in the East, the Midwest, or California, almost certainly in the larger population centers. Thirty-seven percent had BA degrees and five percent had MA degrees. One woman had a PhD.

When asked to check the reasons why they entered their field, 91 percent checked "I enjoy the work," 74 percent checked "I like the people with whom I come in contact" and 67 percent checked "My training prepared me for it." Reasons checked infrequently had to do with the importance of monetary reward. These responses support the assumption that the criterion group members find an intrinsic interest in their jobs; though we did not collect income data, these women probably have better incomes than most of the other samples. Consequently, they were less concerned with the financial aspects of their work.

Results

Figure 21 has the mean SVIB profile for interior decorators. The group scored moderately high on the Musician Performer, Newswoman, and Librarian scales. They differed from other groups studied in having low scores on scales for other nonprofessional occupations and moderate, not low, scores on verbal and aesthetic Occupational Scales.

Their highest scores on the Basic Scales were on the Art, Merchandising, and Performing Arts scales and, their scores on Public Speaking and Writing were higher than those of most of the other groups studied. Their lowest scores were in Social Service, Sports, and Office Practices.

Figure 23 shows how the interior decorators described their jobs. "Outdoor," "Sales," "Complicated," "Unusual," "Artistic," "Independent," and "Business" are the adjectives which they feel characterize their jobs. In addition, they said interior decorating involved more public speaking than did other women's occupations.

Appendix D shows the SVIB items which differentiated interior decorators from WIG_{total}. In general, it shows endorsement of "arty" items and those involving merchandising, and rejection of scientific, clerical, and social service items.

Conclusions

The interior decorators resemble members of professional groups more than any other nonprofessional group studied. It may be that subsequent generations of interior decorators will all have considerable amounts of formal education. Currently, however, the occupation is one women can enter without a full college education and achieve both artistic and financial success.

Table 49

Demographic Data for the Interior Decorators Criterion Group (N=178)

	Mean	SD	Range
Age (years)	53	9.9	29-78
Formal education (years)	15	2.0	8-19
Experience (years)	23	8.6	3-55
Number of children (married subjects)	1.4	1.0	0-4

Marital Status (in percent)

Single	15
Married	52
Widowed	14
Divorced	19

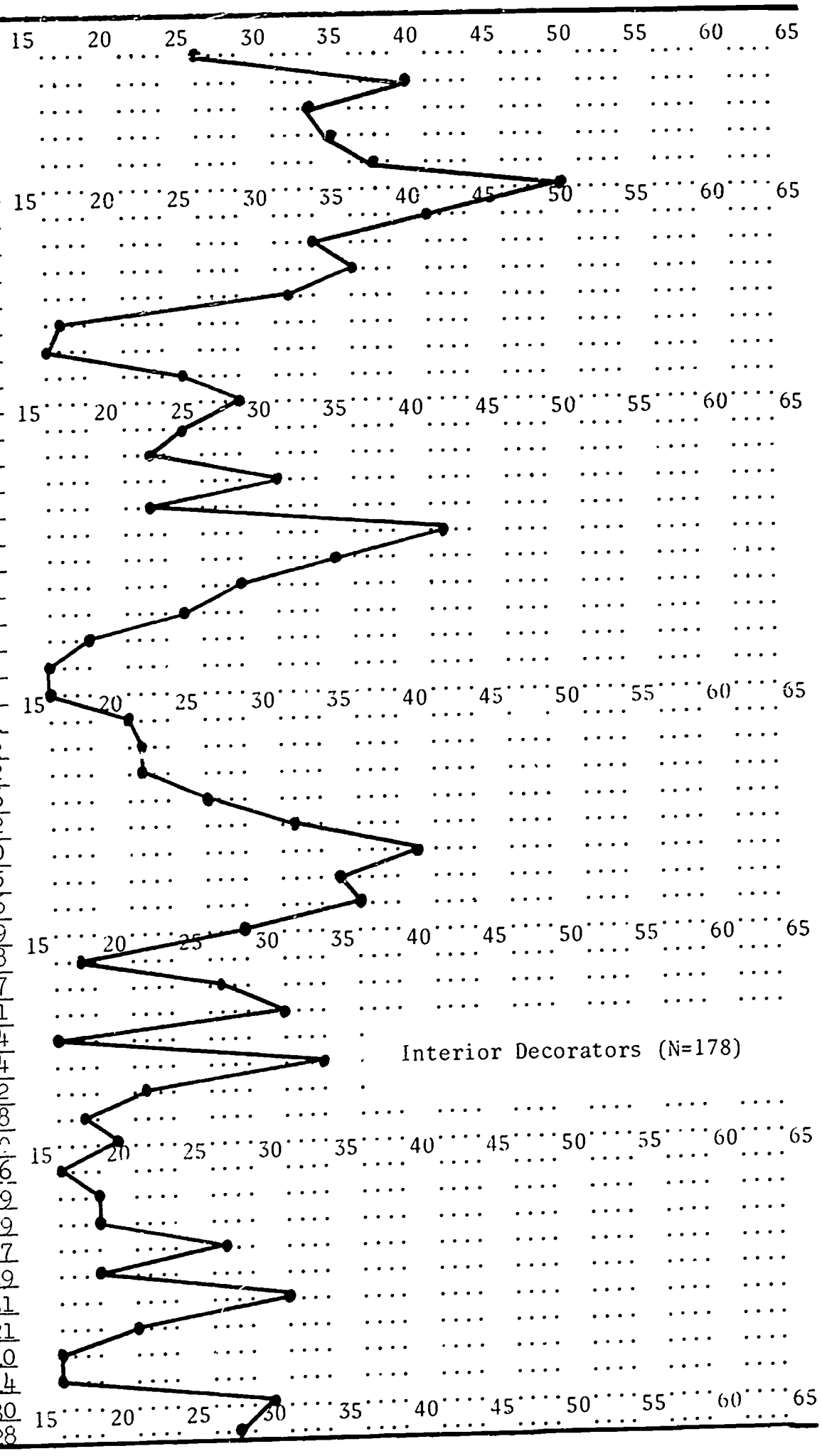
Geographical Area (in percent)

New England	6
East	22
South	14
Southwest	11
Midwest	23
Northwest	3
California	21

Figure 21

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	26
Musician Performer	40
Entertainer	34
Model	35
Artist	38
Interior Decorator	50
Newswoman	41
English Teacher	34
Language Teacher	36
YWCA Staff Member	32
Director, Christian Education	17
Nun-Teacher	6
Guidance Counselor	25
Social Science Teacher	29
Elementary Teacher	25
Social Worker	23
Speech Pathologist	31
Psychologist	23
Librarian	42
Translator	35
Physician	29
Dentist	25
Medical Technologist	19
Chemist	8
Mathematician	15
Computer Programmer	21
Engineer	22
Army-Enlisted	22
Navy-Enlisted	26
Army-Officer	32
Navy-Officer	40
Lawyer	35
Life Insurance Underwriter	36
Buyer	29
Business Education Teacher	18
Home Economics Teacher	27
Dietitian	31
Physical Education Teacher	14
Occupational Therapist	34
Physical Therapist	22
Public Health Nurse	18
Registered Nurse	20
Licensed Practical Nurse	16
Radiologic Technologist	19
Dental Assistant	19
Executive Housekeeper	27
Instrument Assembler	19
Secretary	31
Saleswoman	21
Sewing Machine Operator	10
Telephone Operator	14
Beautician	30
Stewardess	28



46
Academic Achievement

54
Femininity-Masculinity

Figure 22

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

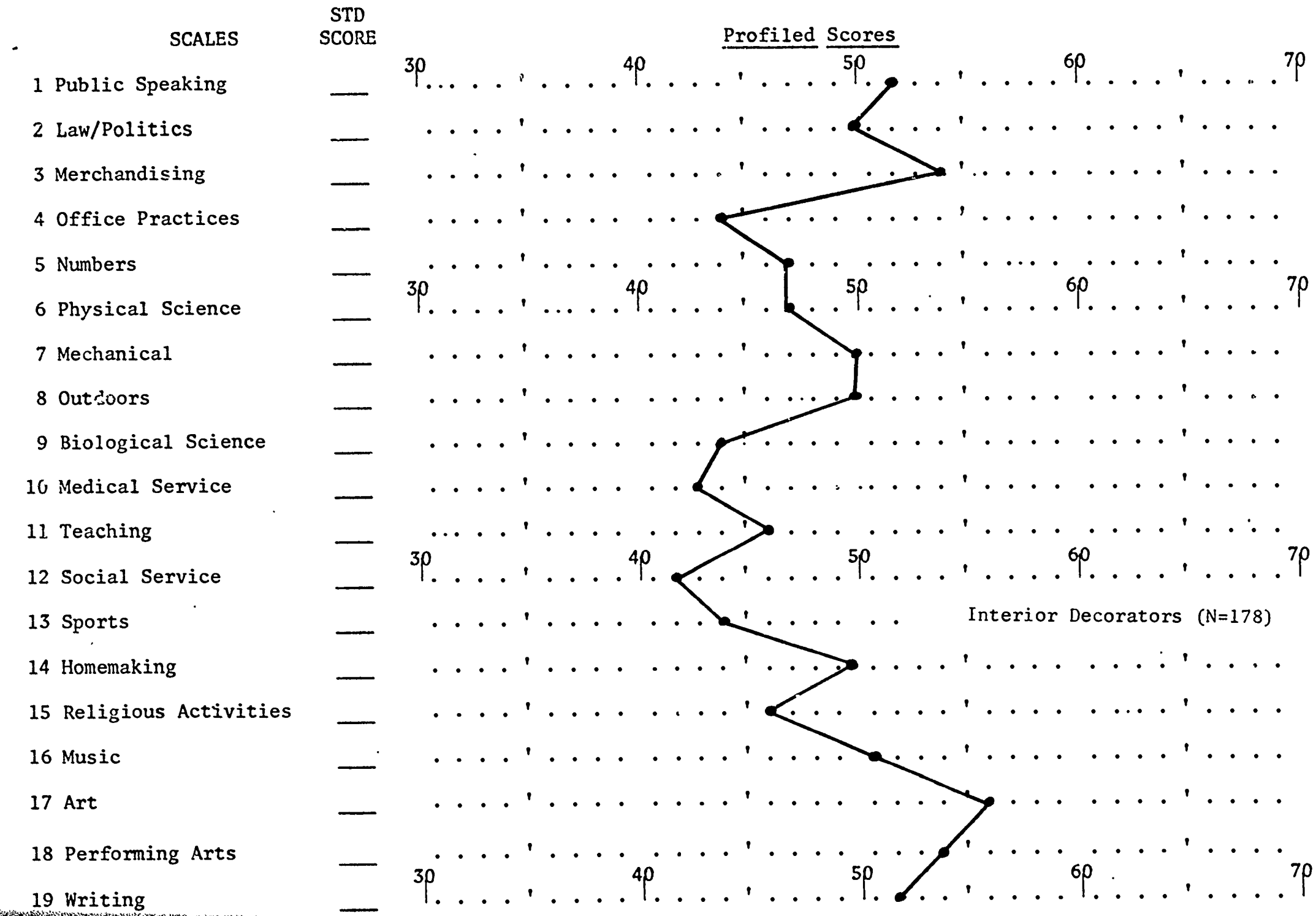
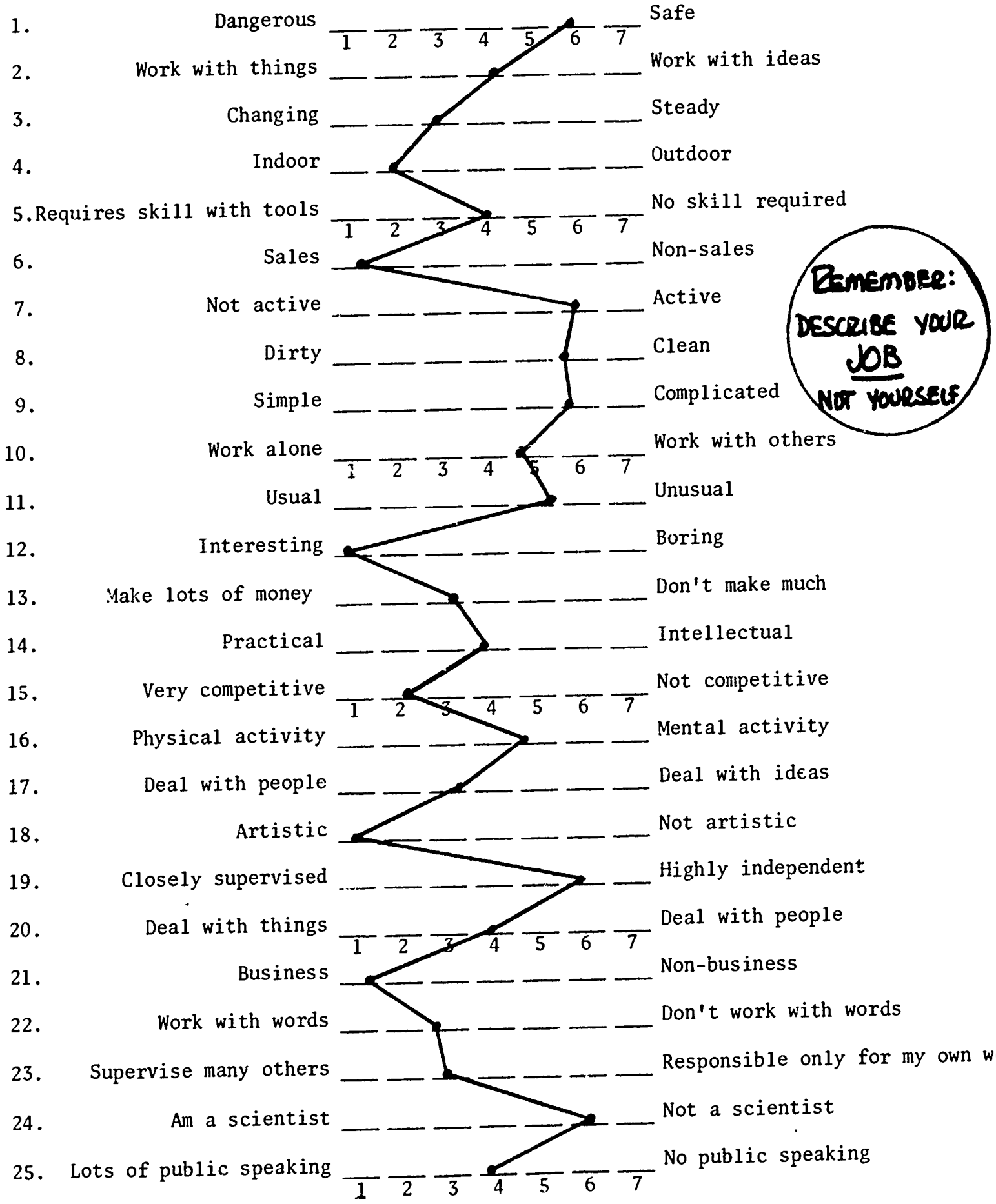


Figure 23

Job Description Checklist

Interior Decorator (N=178)



Chapter 13

The Licensed Practical Nurses

Licensed practical nurses were selected for study here because their occupational activities seem quite consistent with typical feminine interests in helping others, without requiring long or extremely technical training. The LPN, under the direction of the physician or registered nurse, provides care to patients in nursing situations which are relatively free of scientific complexity and in which the patient is in a relatively stable state so that his care need not be continuously modified in accordance with his condition. In these situations, the LPN is trained to provide for the emotional and physical comfort of patients; to observe, record and report the physical and mental condition of the patient; to administer prescribed medications and treatments, such as changing dressings, taking temperature and blood pressure, and giving baths. She may assist professional nurses in more complex procedures or supervise hospital attendants (U. S. Dept. of Labor, 1966b).

Most LPNs are employed in hospitals or nursing homes, clinics, and doctors' offices; a few work on private duty.

The training of the LPN is regulated by the state in which she is trained. To be licensed she must have completed a course in an approved school. These approved courses may be offered in public vocational schools, junior colleges, local hospitals, or private schools, and are usually completed in one year. Students are usuall. high school graduates although many states require less than a high school diploma (U. S. Dept of Labor, 1966b).

After licensing, LPNs find themselves in work settings which often require working during evenings, weekends, or holidays, and physica and mental stamina in the face of understaffed medical situations. The ability to obtain personal satisfaction from ministering to others seems important in such situations.

Method

In the spring of 1966, the National Federation of Licensed Practical Nurses permitted us access to their address files of about 32,000 members. A random sample of 765 LPNs , stratified by geographic location, was drawn from among those with at least 3 years' experience. In an attempt to cut costs this group was randomly reduced to 511.

In July of 1966 these women received a letter asking them to participate in the study by completing the enclosed SVIB and questionnaire and returning it in a prepaid envelope. In September of 1966 384 follow-up letters were sent to urge women who had not completed the SVIB

and questionnaire to do so. In October, when it became apparent that the rate of return of the first group was too low to provide a large criterion group, the 254 members of the original sample who had not been contacted received the same request for ccoperation their colleagues had received earlier.

Finally, by February of 1967, 276 of the 765 (34 percent) had returned SVIBs. The actual criterion group included only 222 LPNs, with 37 eliminated because they disliked their jobs, three because they were unemployed, and 14 because their returns came too late to be included in the analysis. While the rate of return was not high, all the women in the final criterion group had a considerable degree of commitment to their jobs.

Demographic Data

Table 50 presents the demographic data for the LPNs. The typical LPN was about 51 years old, married, with two children. She had a high school education and about 15 years of experience as an LPN. Of course, there were many women in the criterion group who did not fit this 'typical' picture. Any average can be misleading and this one included some 23 year olds, single with only a few years of experience as LPNs, with considerably more formal training than their older colleagues. While 58 percent of the group listed a high school degree as their highest one, 39 percent of the group cited formal study beyond high school in a medical field, mostly toward the LPN license.

When asked why they entered their occupation, 92 percent cited enjoyment of the work, and 80 percent cited satisfaction gained from relationships with people with whom they come in contact. Only 12 percent indicated having made the choice because it was the most highly paid job available. Again, these seem to be women who truly enjoy their work.

Results

The average SVIB profile for the LPNs is in Figure 24 On the Occupational Scales, LPNs scored high on their own scale and other scales for medical-helping occupations, especially those which are not based on scientifically complex foundations. The lowest scores were on the Interior Decorator and Psychologist scales, and scores on the professional level scales were low, except those with some medical flavor, and the Elementary Teacher scale.

On the Basic Scales, their highest scores were on the Medical Service and Biological Science scales, the Religious Activities and Homemaking scales were also high.

Figure 26 shows how LPNs describe their jobs. The adjectives or phrases on which they differed most from other nonprofessional women were "Non-sales," "Active," and "Deal with people." Despite their interest in biological science, they did not describe themselves as scientists.

The SVIB items which differentiated this group from WIG_{total} are in Appendix D. Endorsement of items such as "taping a bruised ankle" and "giving first aid assistance" suggest their interest in medical service. Items such as bacteriology, biology, chemistry, physics and physiology suggest their interest in biological sciences. Their religious interests are detailed by items such as "church worker," "Missionary," "reading the Bible," "going to church," and "Bible History."

Conclusions

Licensed practical nurses have vocational interests which differentiate them from other nonprofessional occupational groups. They are oriented toward biological science, even if they do not see their jobs as scientific. They have strong needs to serve others, especially in medical settings; these needs may be closely related to their religious feelings. Good use can be made of this information in counseling young women.

Table 50

Demographic Data on the Licensed Practical Nurse Criterion Group (N=222)

	Mean	SD	Range
Age (years)	51	9.9	23-70
Formal education (years)	12	1.6	6-16
Experience (years)	15	9.2	1-68
Number of children (married subjects)	2.0	1.6	0-9

Marital Status (in percent)

Single	17
Married	58
Widowed	16
Divorced	10

Geographical Location (in percent)

New England	12
East	10
South	25
Southwest	8
Midwest	24
Northwest	13
California	8

Figure 24

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

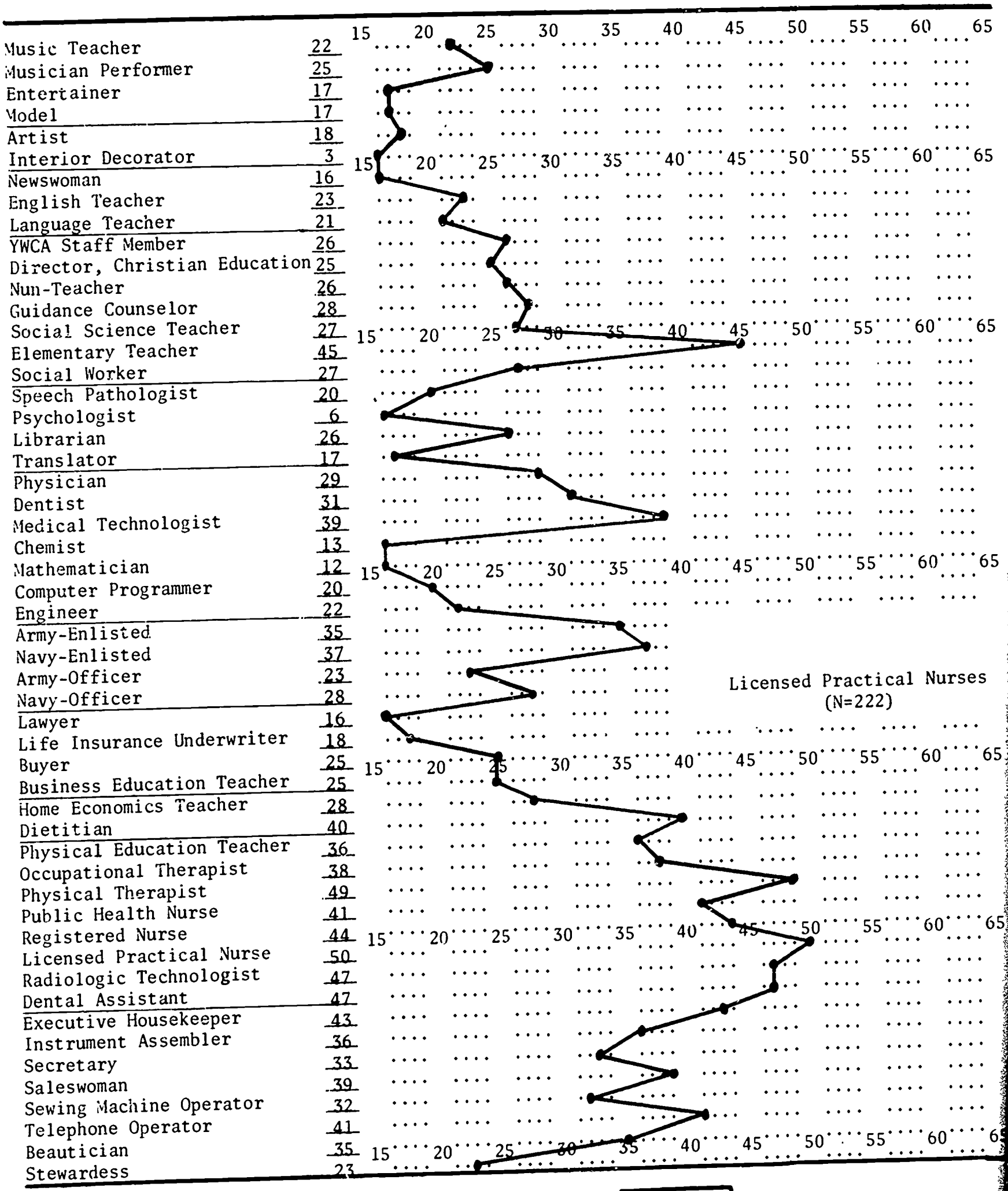


Figure 25

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

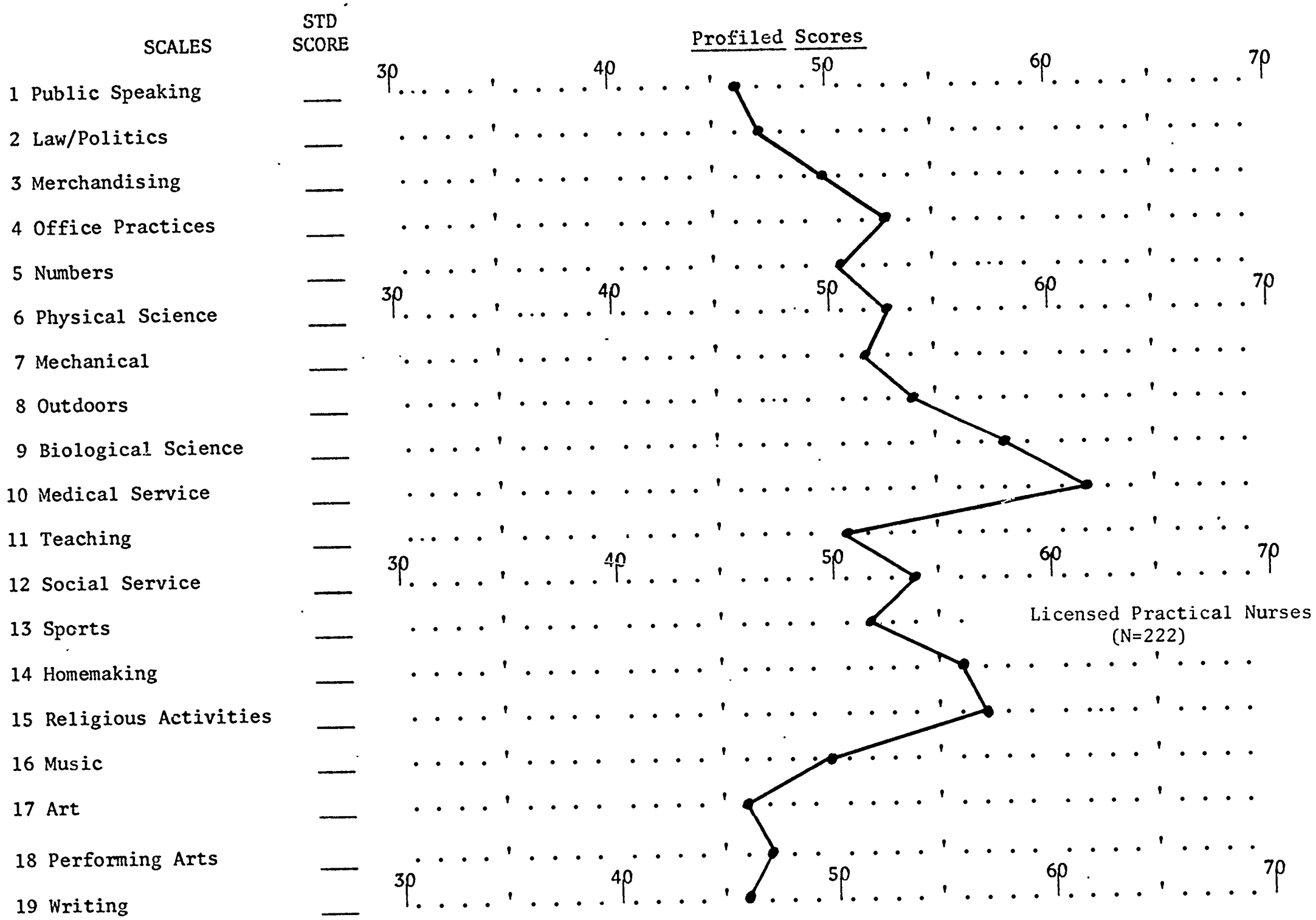
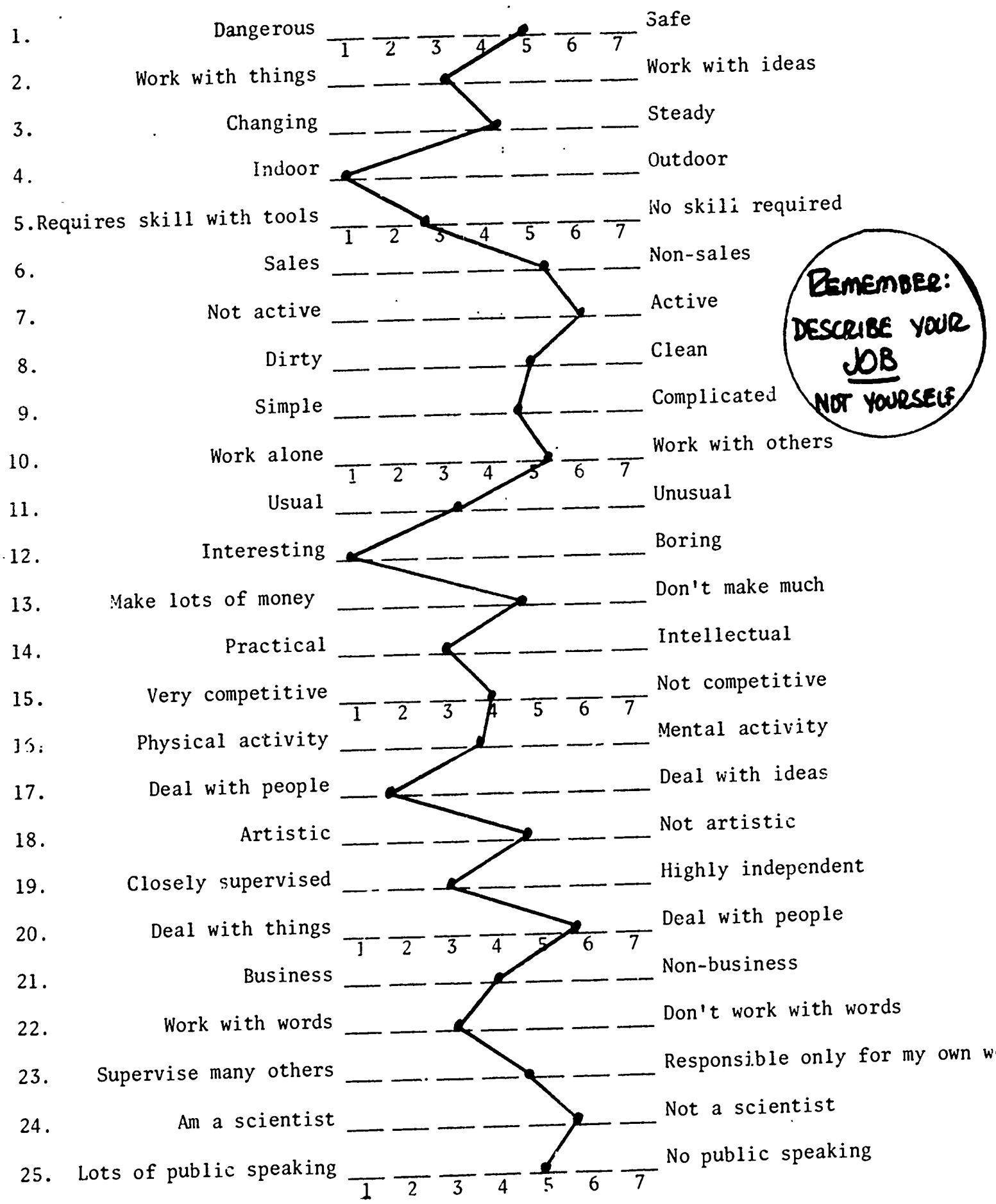


Figure 28

Job Description Checklist

Licensed Practical Nurses (N=222)



Chapter 14
The Life Insurance Underwriters

The life insurance underwriters were included here to broaden the coverage into the direct sales areas. The occupation can best be described by quoting directly from a pamphlet published by the U. S. Department of Labor, in 1961, "Careers for Women as Life Underwriters."

> "Life Underwriters are the field representatives of the companies to which they are under contract either directly or through the general agent, who operates a local outlet for a company. Their role in the industry is to sell life insurance. The many other activities they engage in are designed to improve the volume and the quality of sales.
>
> Agents spend much of their working time consulting with prospective clients in their homes or places of work. Underwriters must know and be able to describe in clear, non-technical language the variety of policies their companies offer.
>
> Underwriters should be able to counsel their clients regarding the suitability of different policies to meet individual needs. They must inspire confidence in their judgment and honesty. They should achieve a good personal relationship with their clients, since an appropriate sale depends on having an intimate knowledge of the clients' financial status and requirements.
>
> The underwriter assists in preparing the application form, collects the initial premium, arranges for a medical examination, and delivers the policy to the client. Thereafter, underwriters provide service for their clients, such as assisting with the settlement of benefit claims, changes in beneficiaries, conversion of policies, and similar matters.
>
> Agents also spend time in their own homes or offices preparing reports, keeping records, developing lists of prospects, making appointments, and sending out information and promotional literature. Underwriters inclined toward the more complex aspects of life insurance spend time at their desks planning and designing insurance programs of a more difficult nature including the creation, conservation, and distribution of estates; business insurance; group insurance, and pension plans.
>
> Most full-time underwriters devote some time to agency or branch office training meetings and other work conferences; many read and study extensively the ever-changing legal, social, and economic aspects of life insurance, and many participate in company, and in local, regional, or national conventions." (U. S. Dept. of Labor, 1961.)

This occupation would seem to have many features attractive to women. The hours are flexible, the pay is good--or at least equal to the pay for men for the same work--the job requires an individual to think sensibly about family finances and estate planning and the like, it requires no capital investment and a relative minimum of training. Also, there are many openings and the many companies seem to be actively recruiting women. Yet, this is a very unpopular occupation among women; in fact, when the occupations listed in the SVIB booklet are rank-ordered according to their popularity of response, the item "Life Insurance Saleswoman" is lowest, even below "Waitress" in the percent of women who respond "Like." Clearly, the occupation needs a new image among working women.

Method

The women in the life insurance underwriter sample were members of the Women's Quarter Million Dollar Round Table of the National Association of Life Underwriters. To be eligible for this organization, the individual must have sold at least $250,000 worth of insurance annually. About 90 percent of these women had produced more than $400,000, and 10 percent had produced $1,000,000 or more.

With the cooperation of the organization's officers, a mailing was sent to all 365 members in July, 1967. 219 completed returns were received, and 188 of them used in the final criterion group.

Demographic Data

The average age of the life insurance underwriters was higher than for the other groups; their mean was 53, and the standard deviation was 9.6. This occupation appears to attract women later in their life, possibly because it may attract women with strong economic needs. Almost two out of five of these women were widowed or divorced, and they may be more strongly economically motivated than women in other occupations. Many of them have family responsibilities and this occupation allows them to make an adequate income while at the same time fulfilling family responsibilities.

The geographic distribution is listed in Table 51along with information about their educational level. On the average they had 14 years of formal education and about one third of them had graduated from college. Generally, however, the highest education was a high school diploma.

The marital status data are also in Table 51 and, as mentioned earlier, there were a somewhat higher percentage of widowed and divorced women in this sample.

Results

The scores for the life underwriters on the SVIB Occupational Scales are given in Figure 27 Their only high-score was on their own scale, and the only scores of 40 or above were on the Lawyer and Navy Officer scales. The mild similarity between their interests and lawyers is easy to understand, but the common interests between them and Navy Officers is less apparent, their scores on the Basic Interest Scales provide some clues. Those means are listed in Figure 28 and the Life Underwriters' highest score was on the Merchandising scale, as appropriate, with other high scores on the Public Speaking and Law/Politics scales--scales that are also high among women Navy Officers.

The low mean scores for the life underwriters were on the Mechanical and science-oriented scales, just as among male salesmen.

Conclusions

The life underwriters in this sample, drawn from among the more successful women in their field, were older than most of the women in the other samples in this project, and more often from family situations that suggested that they had strong economic needs. Many of them were enthusiastic about their work, and were actively recruiting others to enter this occupation, yet among women at large, this is a very unappealing career. Placing a scale for this occupation on the SVIB profile should be helpful in drawing this possibility to the attention of those women who have the appropriate pattern of merchandising and public speaking interests.

Table 51

Demographic Data for Life Insurance Underwriters

	Mean	SD	Range
Age (years)	53	9.6	29-76
Education (years)	14	2.3	8-20
Experience (years)	15	9.5	3-48
Number of children (married subjects)	2	1.5	0-7

Marital Status (in percent)

Single	23
Married	40
Widowed	18
Divorced	19

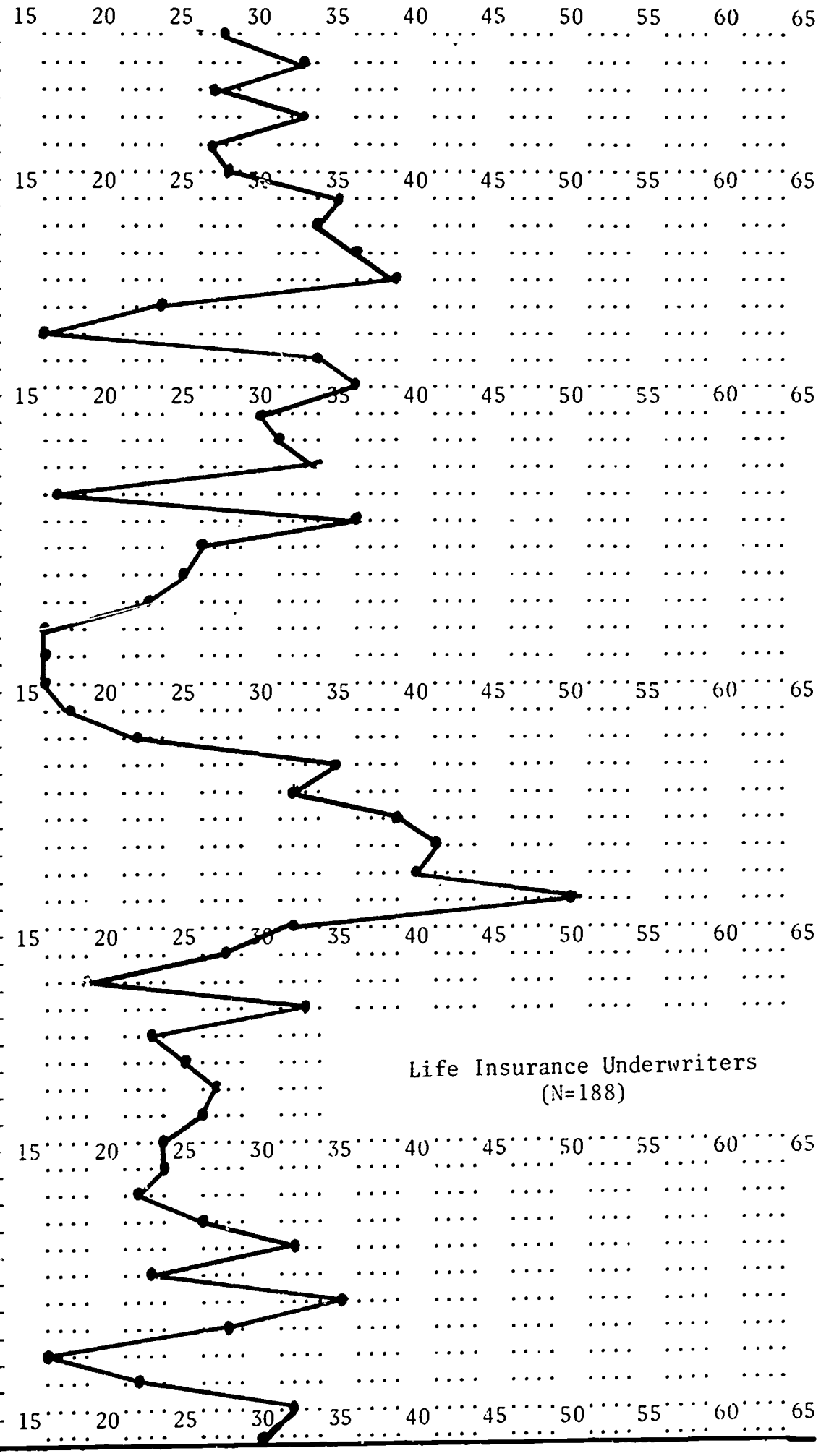
Geographic Location (in percent)

New England	4
East	17
South	21
Southwest	10
Midwest	30
Northwest	5
California	13

Figure 27

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	28
Musician Performer	33
Entertainer	27
Model	33
Artist	27
Interior Decorator	28
Newswoman	35
English Teacher	34
Language Teacher	36
YWCA Staff Member	39
Director, Christian Education	24
Nun-Teacher	11
Guidance Counselor	34
Social Science Teacher	36
Elementary Teacher	30
Social Worker	31
Speech Pathologist	34
Psychologist	17
Librarian	36
Translator	26
Physician	25
Dentist	23
Medical Technologist	19
Chemist	6
Mathematician	12
Computer Programmer	18
Engineer	22
Army-Enlisted	35
Navy-Enlisted	32
Army-Officer	39
Navy-Officer	41
Lawyer	40
Life Insurance Underwriter	50
Buyer	32
Business Education Teacher	28
Home Economics Teacher	19
Dietitian	33
Physical Education Teacher	23
Occupational Therapist	25
Physical Therapist	27
Public Health Nurse	26
Registered Nurse	24
Licensed Practical Nurse	24
Radiologic Technologist	22
Dental Assistant	26
Executive Housekeeper	32
Instrument Assembler	23
Secretary	35
Saleswoman	28
Sewing Machine Operator	15
Telephone Operator	22
Beautician	32
Stewardess	30



44
Academic Achievement

43
Femininity-Masculinity

Figure 28

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

SCALES	STD SCORE
1 Public Speaking	___
2 Law/Politics	___
3 Merchandising	___
4 Office Practices	___
5 Numbers	___
6 Physical Science	___
7 Mechanical	___
8 Outdoors	___
9 Biological Science	___
10 Medical Service	___
11 Teaching	___
12 Social Service	___
13 Sports	___
14 Homemaking	___
15 Religious Activities	___
16 Music	___
17 Art	___
18 Performing Arts	___
19 Writing	___

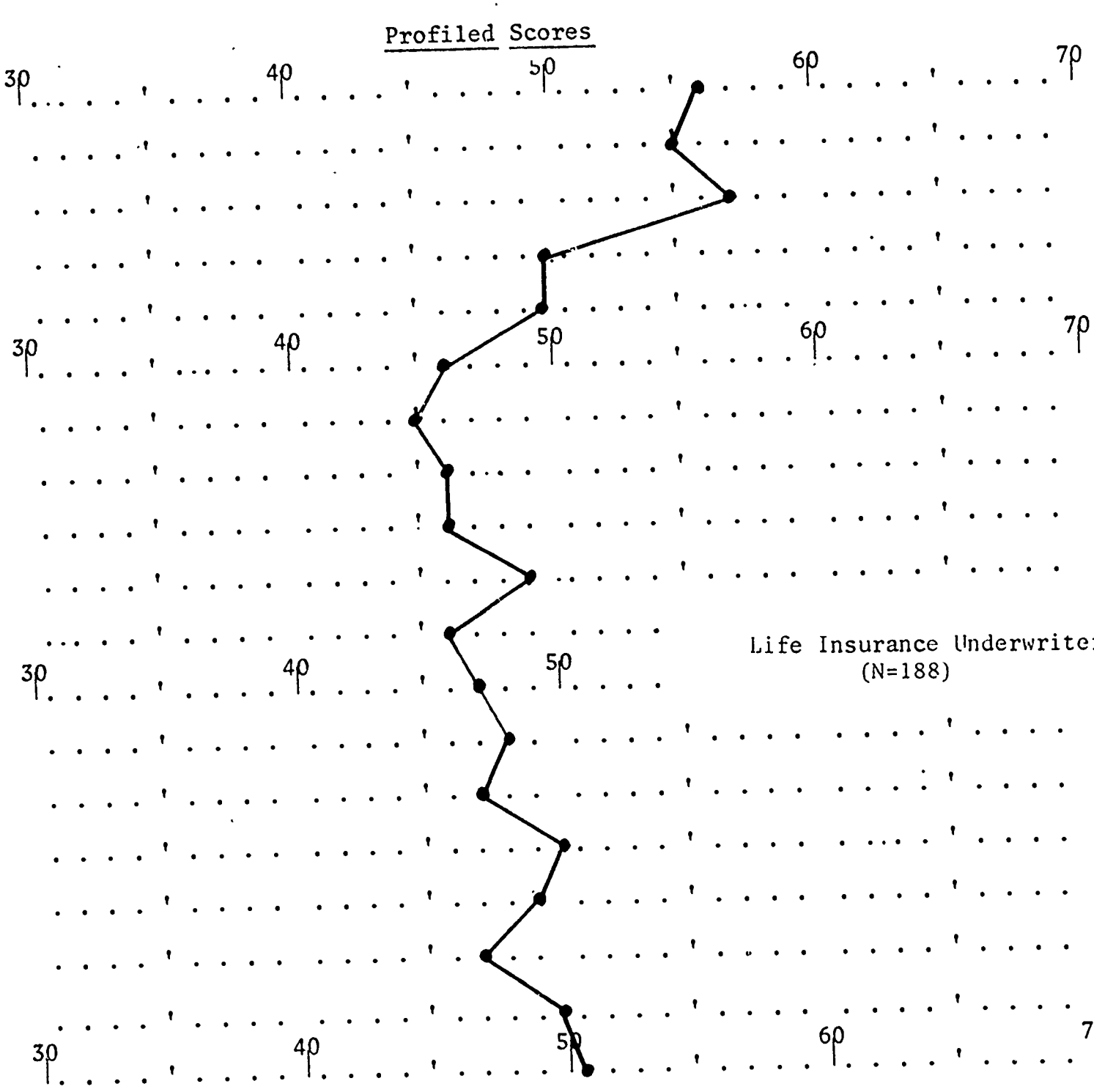


Figure 29

Job Description Checklist

Life Insurance Underwriters (N=188)

1.	Dangerous								Safe
2.	Work with things								Work with ideas
3.	Changing								Steady
4.	Indoor								Outdoor
5.	Requires skill with tools								No skill required
6.	Sales								Non-sales
7.	Not active								Active
8.	Dirty								Clean
9.	Simple								Complicated
10.	Work alone								Work with others
11.	Usual								Unusual
12.	Interesting								Boring
13.	Make lots of money								Don't make much
14.	Practical								Intellectual
15.	Very competitive								Not competitive
16.	Physical activity								Mental activity
17.	Deal with people								Deal with ideas
18.	Artistic								Not artistic
19.	Closely supervised								Highly independent
20.	Deal with things								Deal with people
21.	Business								Non-business
22.	Work with words								Don't work with words
23.	Supervise many others								Responsible only for my own work
24.	Am a scientist								Not a scientist
25.	Lots of public speaking								No public speaking
		1	2	3	4	5	6	7	

Chapter 15
The Radiologic Technologists

The radiologic technologist is most often employed in a medical setting where she makes X-Ray exposures to assist the physician in examining for broken bones, ulcers, tumors, disease or malfunction. She may also assist the physician in administering chemical substances, often radioactive isotopes, which aid in making certain diagnostic tests. Another function is to assist the radiologist in the treatment of patients by exposure to X-Ray or other forms of ionizing radiation.

While radiologic methods are important in both diagnosis and treatment of some diseases, the radiologic technologist is prohibited by her code of ethics from making diagnoses or prescribing treatment. She always works under the direction of a radiologist or physician.

Radiologic methods are also used in law enforcement to detect contraband, in industry for tasks such as the examination of critical aircraft and missile castings, and in museums to authenticate art works, thus, some radiologic technologists are employed in non-medical settings (American Society of Radiologic Technologists, 1966).

The radiologic technologist is trained in a program conducted by a hospital or medical school and approved by the American Medical Association. High school graduation is required for acceptance in these programs, and high school courses in science are desirable. The training program usually takes two years and includes classes in anatomy, physiology, physics, radiographic exposure and positioning, X-Ray therapy, and ethics. Practical clinical work is an important part of the training program (Dept. of Labor, 1966b).

Once the basic course is completed the student may elect to complete an additional year of training to become a nuclear medicine technologist or radiation therapy technologist. Whether the student undertakes a specialization or not, she usually takes one of the American Registry of Radiologic Technologists certification examinations (X-Ray, nuclear, or radiation therapy). Many radiologic technologists certified before 1966 (those in our sample) may not have the same level of training as those more recently certified.

Method

The American Society of Radiologic Technologists cooperated in this study, and a sample was selected from their roster of 13,000 members, 70 percent of whom are women. A random sample, stratified as to geographical area, was drawn and, in July, 1967, 499 women were mailed the research forms. About two weeks later, non-respondents received a follow-up reminder. In August a second sample of 200 radiologic technologists was selected, in the same way as was the original sample, to increase the potential size of the criterion group.

By December, 377 women (54 percent) had responded. After eliminating 35 women with less than three years of experience, 14 who expressed dissatisfaction with their occupation, and 21 who were currently unemployed, the final criterion group contained 307 radiologic technologists.

Demographic Data

Table 52 describes the criterion group. The average radiologic technologist was 34 years old, married, with one child. She had 13 years of formal education and 10 years of experience; 4.6 percent had bachelor's degrees and 41.1 percent had paramedical training beyond high school.

When asked to check why they entered their occupation, the most popular reason (79 percent) was "I enjoy the work" and the second most popular (67 percent) was "I like the people with whom I come in contact." Only 12 percent checked "I need the income, otherwise I would not work." This is a similar pattern found in other occupations and indicates that these women do find intrinsic satisfaction in their work.

Results

Figure 30 shows the radiologic technologists' mean SVIB profile. On the average, these women scored high (A) on only one occupational scale other than their own, Physical Therapist. They had moderately high scores (B+) on the Medical Technologist and Dental Assistant scales, all of these seem reasonable. Their scores on aesthetic, verbal, and social service Occupational Scales, except those involving medical service, were quite low.

On the Basic Scales, their highest scores were on the Medical Service and Biological Science scales. Their pattern here was much like the licensed practical nurses except that the radiologic technologists did not score high on the Religious Activities scale.

The job description of radiologic technologists is shown in Figure 32 Although they did not rate their job as extremely dangerous, they did rate it more dangerous than any other group studied. Radiation can be harmful and their rating probably reflects a healthy caution. Although they did not think of themselves as scientists, they did place themselves further on the scientific end of that dimension than any other group studied here. Along with the other medical service groups, they did describe their job as a highly active one, perhaps a reflection of the standing/sitting ratio and a shortage of trained workers.

The SVIB items which differentiated radiologic technologists from WIG_{total} are shown in Appendix D. In general, they endorsed scientific and medical items, with also a hint of a preference for the impulsive and dangerous. This disposition might be related to the average age of the group members, but it did not appear among the beauticians, an equally youthful sample. Radiologic technologists, more often than Women-in-General, rejected those items having to do with writing, public speaking, and educational functions.

Conclusions

The radiologic technologists were the most scientifically oriented of the nonprofessional criterion groups. While they work with medical patients, their contacts are less personal and more rigidly prescribed than the contacts of licensed practical nurses or dental assistants. In a sense, they appear to be the junior scientists of the paramedical world.

Table 52

Demographic Data for the Radiologic Technologist Criterion Group (N=307)

	Mean	SD	Range
Age (years)	34	11.1	20-69
Formal education (years)	13	1.2	8-17
Experience (years)	10	7.2	3-40
Number of children (married subjects)	1.2	1.3	0-7

Marital Status (in percent)

Single	42
Married	48
Widowed	2
Divorced	9

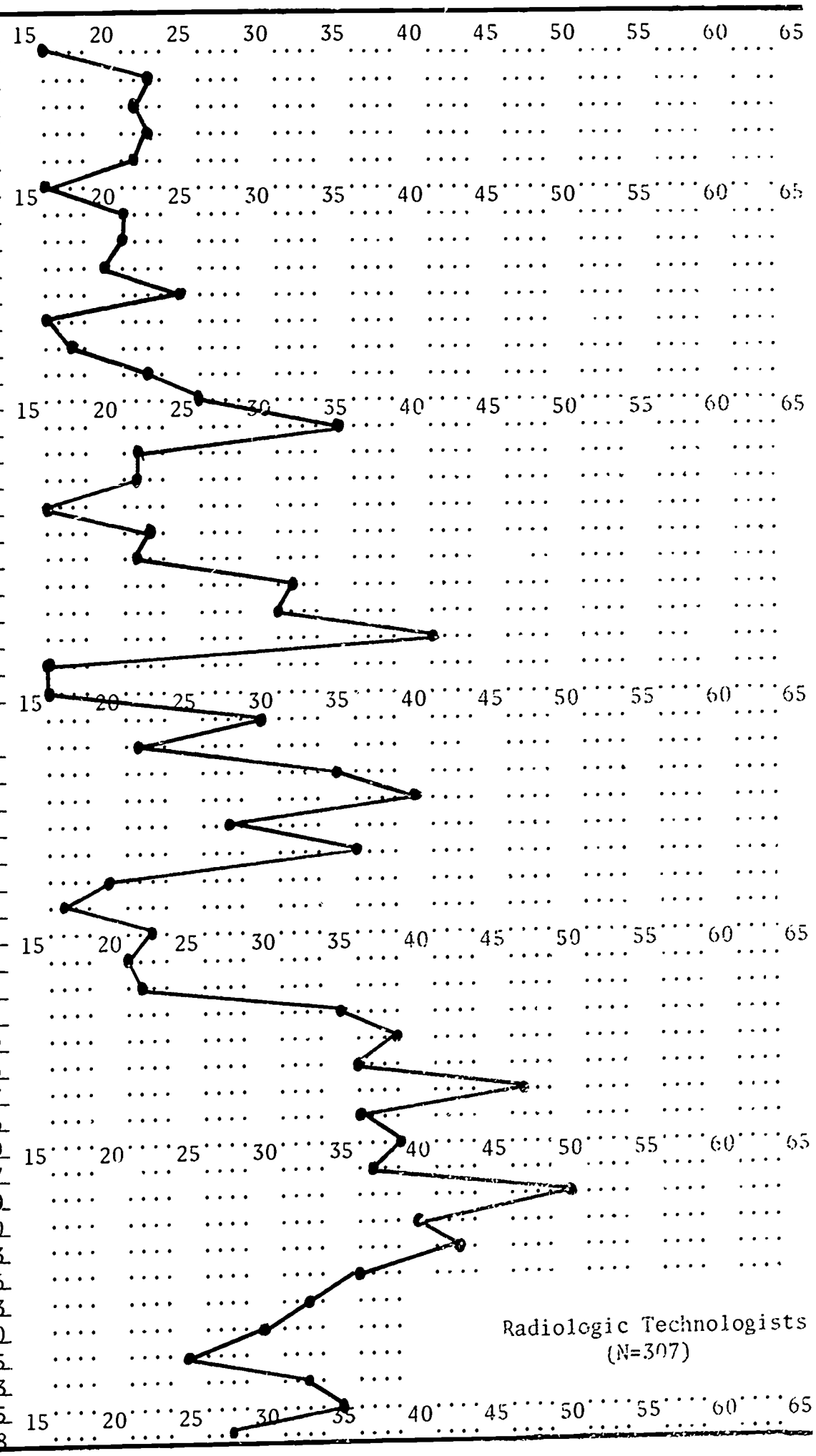
Geographical Location (in percent)

New England	11
East	9
South	23
Southwest	15
Midwest	26
Northwest	8
California	8

Figure 30

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	14
Musician Performer	23
Entertainer	22
Model	23
Artist	22
Interior Decorator	7
Newswoman	21
English Teacher	21
Language Teacher	20
YWCA Staff Member	25
Director, Christian Education	15
Nun-Teacher	18
Guidance Counselor	23
Social Science Teacher	26
Elementary Teacher	35
Social Worker	22
Speech Pathologist	22
Psychologist	12
Librarian	23
Translator	22
Physician	32
Dentist	31
Medical Technologist	41
Chemist	14
Mathematician	15
Computer Programmer	30
Engineer	22
Army-Enlisted	35
Navy-Enlisted	40
Army-Officer	28
Navy-Officer	36
Lawyer	20
Life Insurance Underwriter	17
Buyer	23
Business Education Teacher	21
Home Economics Teacher	22
Dietitian	35
Physical Education Teacher	39
Occupational Therapist	36
Physical Therapist	47
Public Health Nurse	36
Registered Nurse	39
Licensed Practical Nurse	37
Radiologic Technologist	50
Dental Assistant	40
Executive Housekeeper	43
Instrument Assembler	36
Secretary	33
Saleswoman	30
Sewing Machine Operator	25
Telephone Operator	33
Beautician	35
Stewardess	28



43
Academic Achievement

40
Femininity-Masculinity

Figure 31

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

SCALES	STD SCORE
1 Public Speaking	___
2 Law/Politics	___
3 Merchandising	___
4 Office Practices	___
5 Numbers	___
6 Physical Science	___
7 Mechanical	___
8 Outdoors	___
9 Biological Science	___
10 Medical Service	___
11 Teaching	___
12 Social Service	___
13 Sports	___
14 Homemaking	___
15 Religious Activities	___
16 Music	___
17 Art	___
18 Performing Arts	___
19 Writing	___

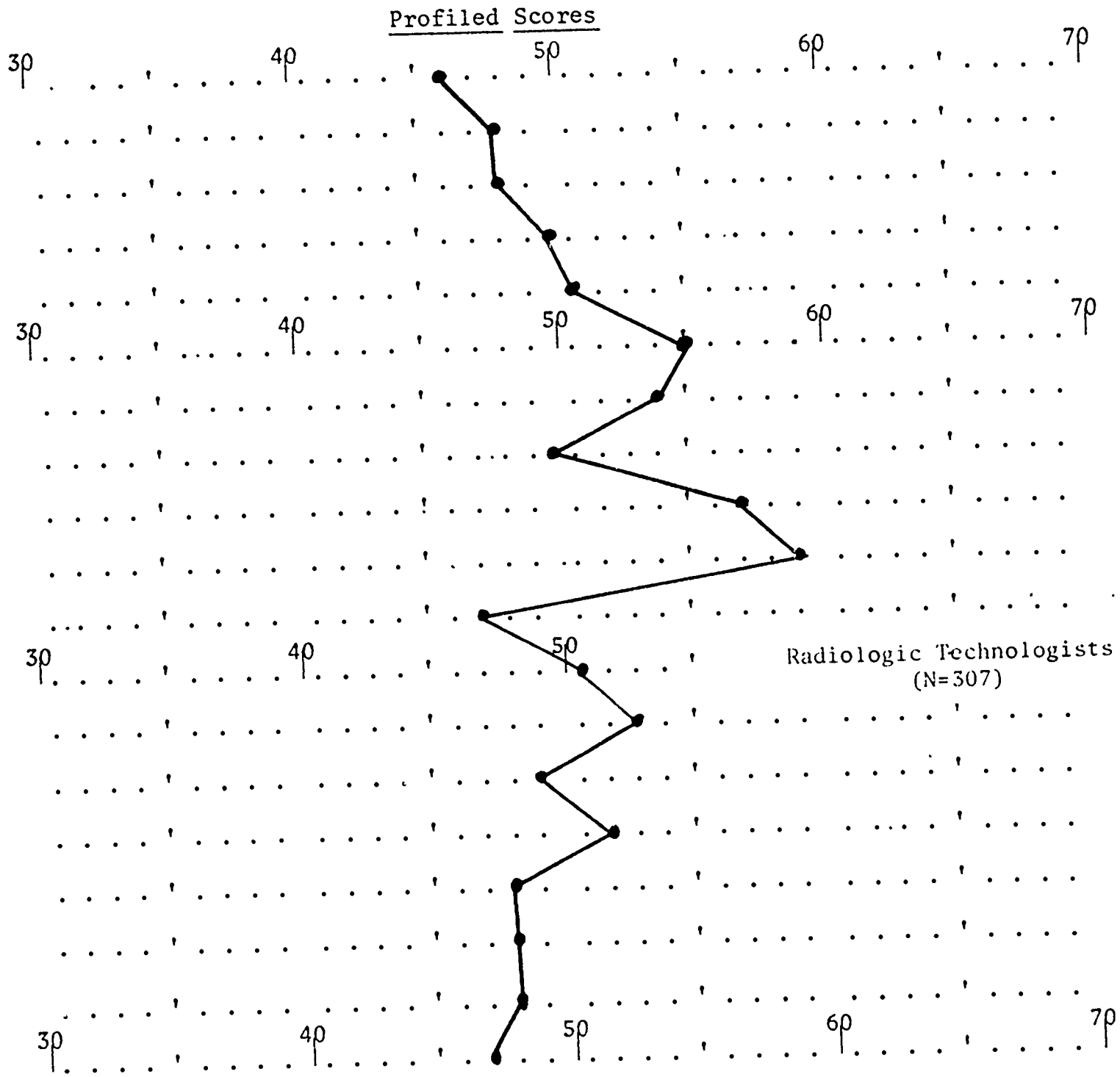
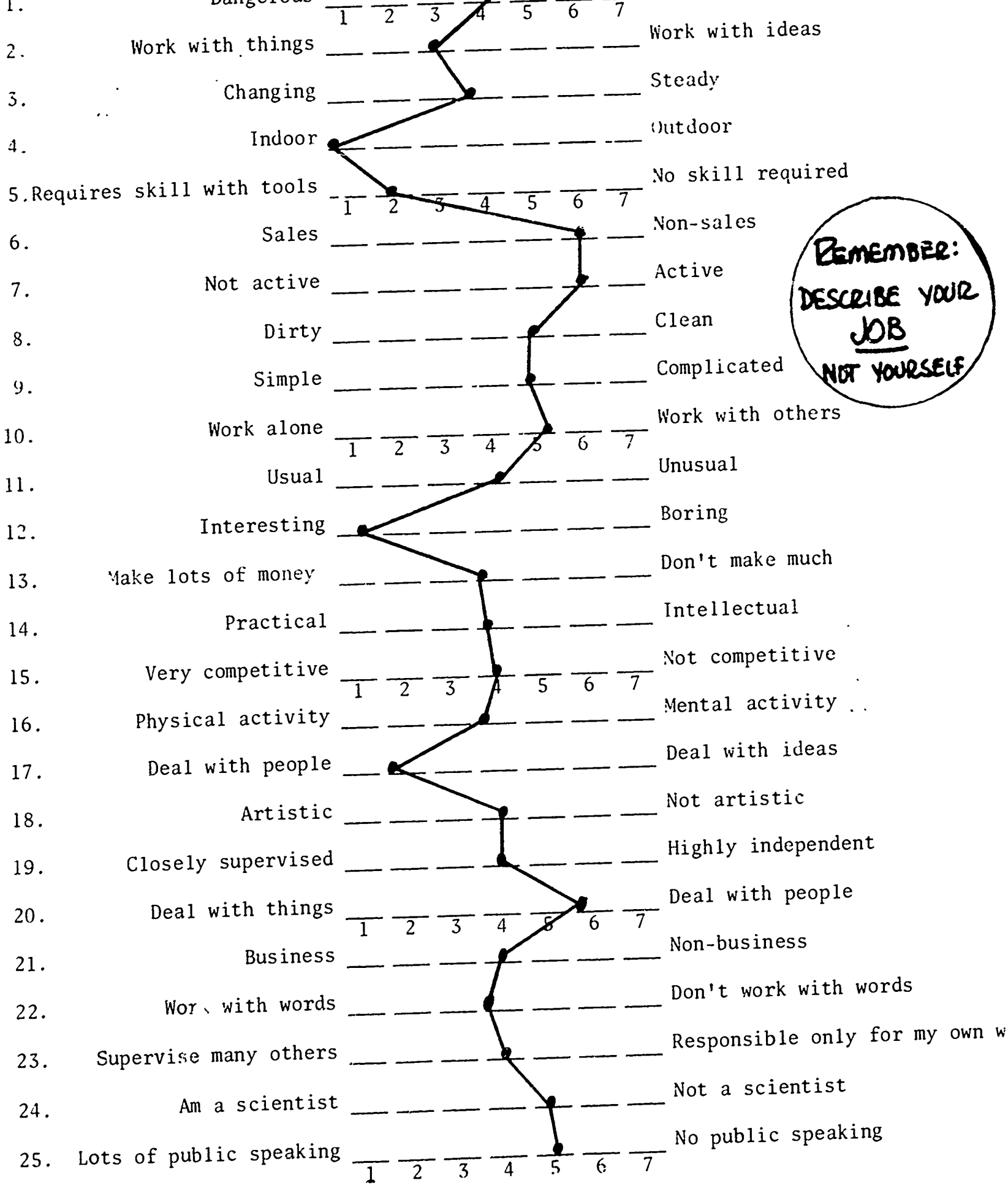


Figure 32

Job Description Checklist

Radiologic Technologists (N=307)



Chapter 16

The Retail Saleswomen

Retail saleswomen sell all types of products from appliances to toy zebras. Their job requires that they be pleasant and helpful to customers, know their merchandise well, be able to handle money, and keep records of sales. Various studies have suggested that sales performance is more closely related to the salesperson's knowledge of his products and attention to the details of service than to the salesman's personality. These characteristics are probably more controllable in job training than in selection, but the basic pattern of interests should be present.

Ordinarily a high school education is preferred by employers but not required by all. Most saleswomen are trained on the job though some of the larger stores have formal training programs for new employees lasting one or two days. Some high schools offer courses in distributive education and these provide good training for sales careers.

Approximately one and a half million women were employed in retail sales in 1965 and about 135,000 yearly openings occur (U. S. Dept. of Labor, 1966b). The only occupation in which more women were employed in 1960 was that of secretary (U. S. Dept of Labor, 1966b). It is important to understand the interests of women in an occupation where so many women are and will be employed.

Sample

The best sample of retail saleswomen would be one containing women who sold all types of products, and who worked for many different types of retail firms in diverse communities. Such a sample was impossible to assemble. Instead we were fortunate to gain the cooperation of the Dayton Company, a large Minneapolis retail firm; they agreed to help us contact a sample of their saleswomen who met our criteria of job experience and satisfaction.

The Dayton Company, the Twin Cities' largest department store, sells nearly everything, so the saleswomen represented did sell a wide variety of products. Some of them were employed at the Rochester, Minnesota branch of the store so not all of the sample is from a large urban community. The sample, however, represents only one retail firm, but it is a firm with a substantial reputation for customer service, an obvious desire to be in the forefront of current merchandising trends, and a strong belief in serving their community with a variety of public service functions. If our sample is biased, the bias is in the direction of excellence.

The selected sample all had three or more years of experience (N=613). The mailing went out in the late summer of 1966; non-respondents received follow-up reminders about three weeks after the original request.

By December, 281 women (36 percent) had returned completed forms. This rate of response was lower than most of the other occupational samples and we are not sure why. No problems turned up in the mailing, nor in some informal chats with a few of these women. They simply didn't return the forms, and we are without an explanation.

Thirty-eight of the women who responded were not included in the criterion group because they did not like their jobs.

Demographic Data

The final criterion sample of 242 women is described in Table The "typical" saleswoman represented here was 52 years old, married, with two children. She had almost 12 years of education and 15 years of experience. About four percent had BA degress and another three percent had business or paramedical training beyond high school.

When asked to check a list of reasons for entering their occupation, large numbers of them checked "I enjoy the work" (85 percent) and "I like the people with whom I come in contact" (84 percent). These are typical responses across most occupations, probably signifying that the criterion group members are indeed satisfied with their occupations. In comparison with most other occupational criterion groups, a larger number of saleswomen said "I need the money, otherwise I would not work" (43 percent) and "The hours and location of my job fit in with my home life" (67 percent). The latter statement probably reflects the fact that many saleswomen work evenings or short daytime hours.

Results

Figure 33 presents the mean SVIB profile for saleswomen. They scored high (A) on the Elementary Teacher, Executive Housekeeper, and Telephone Operator scales, and moderately high (B+) on the Secretary, Dental Assistant, Instrument Assembler, and Beautician scales. Why they should score this high on these varied occupational scales and lower on the Life Insurance Underwriter and Buyer scales is not intuitively apparent.

On the Basic Scales, their highest scores were, appropriately, on the Merchandising and Office Practices scales, and their scores on the Homemaking and Religious Activities scales were also moderately high. It may be that their interests in the latter three is what they share with secretaries, dental assistants, and telephone operators. In general, a strong "career-orientation" does <u>not</u> appear in these items.

The saleswoman group described their jobs as shown in Figure
They said their jobs involved sales, competition, and business more often than other groups. Surprisingly, of all of the groups studied, they regarded their job as the most simple and usual.

Items which differentiated saleswomen from WIG_{total} are shown in Appendix D. There is no one common theme running through the items they endorsed; instead one can see elements of all the areas represented by high scores on the SVIB Basic Scales.

Conclusions

The saleswomen group, despite the homogeneity of the sample, appear to have heterogeneous interests. Perhaps the reason is that there is a certain amount of convenience and necessity associated with their occupational choice, even though they do like the work that they do.

Table 53

Demographic Data on the Saleswoman Criterion Group
(N=242)

	Mean	SD	Range
Age (years)	52	7.7	21-65
Education (years)	12	1.6	6-16
Experience (years)	15	7.6	3-41
Number of children (married subjects)	1.9	1.4	0-7

Marital Status (in percent)

Single	8
Married	73
Widowed	12
Divorced	7

Figure 33

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

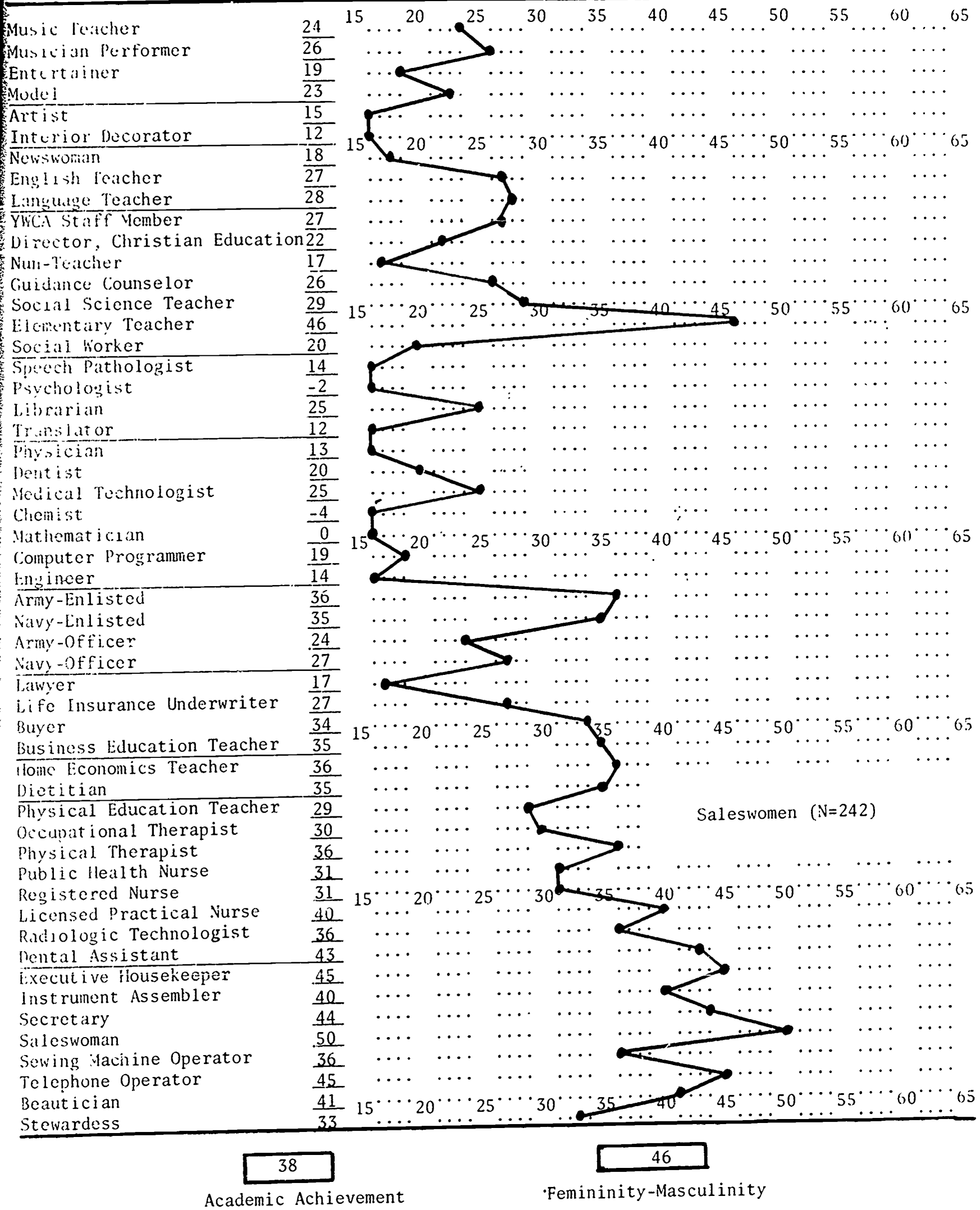


Figure 34

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

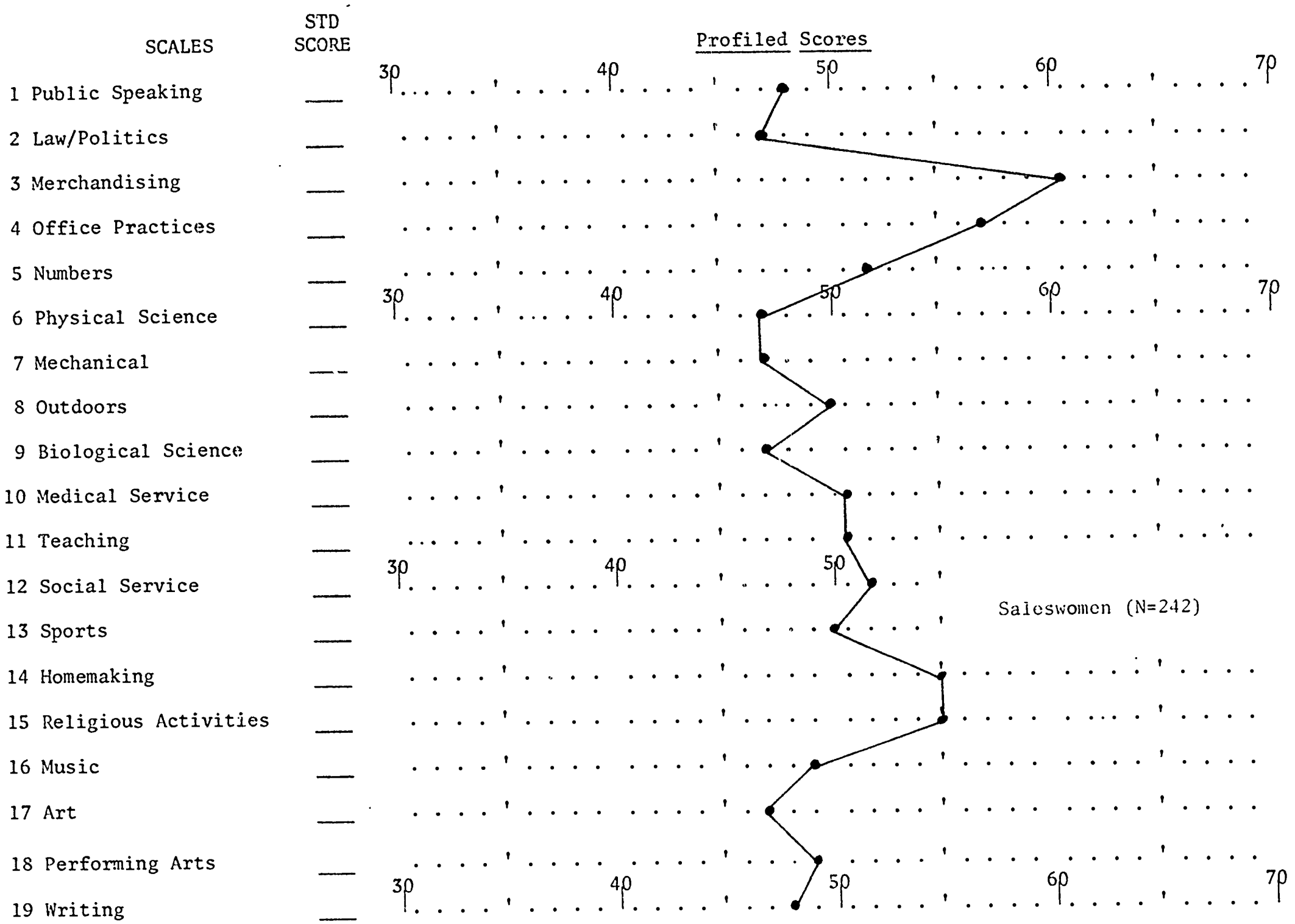
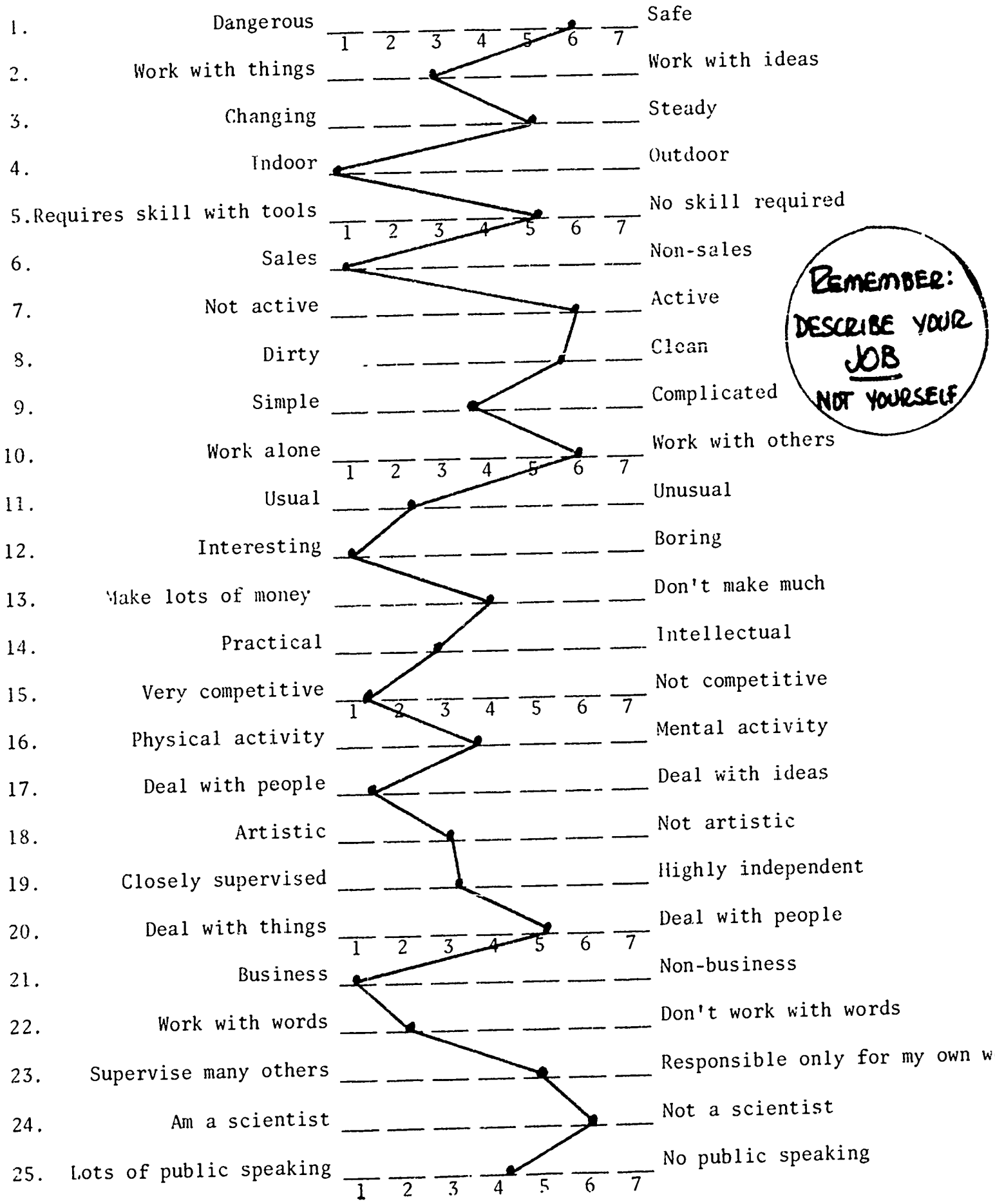


Figure 35

Job Description Checklist

Saleswomen (N=242)



Chapter 17
The Secretaries

More women (1,423,000 in 1960) are employed as secretaries in the United States than in any other occupation; they are employed by all types and levels of business firms, government agencies, educational and special institutions (U. S. Dept. of Labor, 1966b).

Good secretaries are skilled in taking dictation and transcribing it rapidly and accurately. They are distinguished from stenographers by an increased amount of responsibility in their work. A secretary may schedule appointments, set up record systems, handle confidential materials, write routine letters, and supervise other clerical workers. As every man with a secretary knows, a good one can increase her supervisor's efficiency several-fold, a poor one can reduce his business life to disorder and frustration.

Secretaries must be trained in the use of shorthand, typing, and office machines; good grammar and spelling are essential, a good vocabulary helpful. That intangible quality, good judgment, which keeps a secretary from creating embarrassment for her superior is also important. Secretaries are trained in high schools, private business schools and colleges, and the length of training as well as its emphasis is determined by the kind of training institution.

Methods

The sample of secretaries was drawn from three industrial firms, Minnesota Mining and Manufacturing Company, the Pillsbury Company, and Dow Chemical in Midland, Michigan, from the University of Minnesota, and from the National Secretaries Association. Requests to participate were sent to 680 secretaries in September and October of 1967; 76 percent (517) ultimately responded. Fifty-six were eliminated because they disliked their work, 35 because they were no longer employed, and 36 because they had less than three years' experience. The final criterion group included 390 secretaries.

Demographic Data

The demographic data for the secretaries is reported in Table 54 The typical secretary here was 36 years old, married, with one child. She had some education beyond high school and, on the average, 12 years of experience. Five percent had college degrees and, surprisingly, only four percent graduated from a business school.

When asked to indicate their reasons for choosing secretarial work, 82 percent checked "My training prepared me for it." This was a much higher response to this choice than among other occupations (I.e., licensed practical nurses--45 percent, radiologic technologists--37 percent). Still, the reason chosen by the most secretaries (84 percent) was "I enjoy the work."

Results

Figure 36 presents the mean SVIB profile for the secretary criterion group. On the Occupational Scales, they did not score high (A) on any scales but their own, and scored moderately high (B+) on only the Elementary Teacher scale. On the Basic Scales, their highest scores were on the Office Practices and Merchandising scales; their lowest scores were on the scales related to science.

Figure 38 shows how the secretaries described their jobs. Adjectives or phrases which they employed more often than the average nonprofessional worker were "non-sales," "highly independent," "business," and "work with words."

SVIB items which differentiated them from Women-in-General are listed in Appendix D. They reflect both interests in clerical duties and the dislike of scientific activities which were noted in looking at the Occupational and Basic Scale profiles.

Conclusions

Secretaries are basically interested in clerical activities and they dislike science and scientific activities. While many of the other groups studied had clerical interests, they always tended to be in combination with something else--teaching, mechanical, or scientific interests which apparently differentiates these occupations from the secretaries.

Table 54

Demographic Data for the Secretary Criterion Group
(N=390)

	Mean	SD	Range
Age (years)	36	12.3	20-65
Education (years)	13	1.3	10-17
Experience (years)	12	9.0	3-46
Number of children (married subjects)	1.3	1.4	0-6

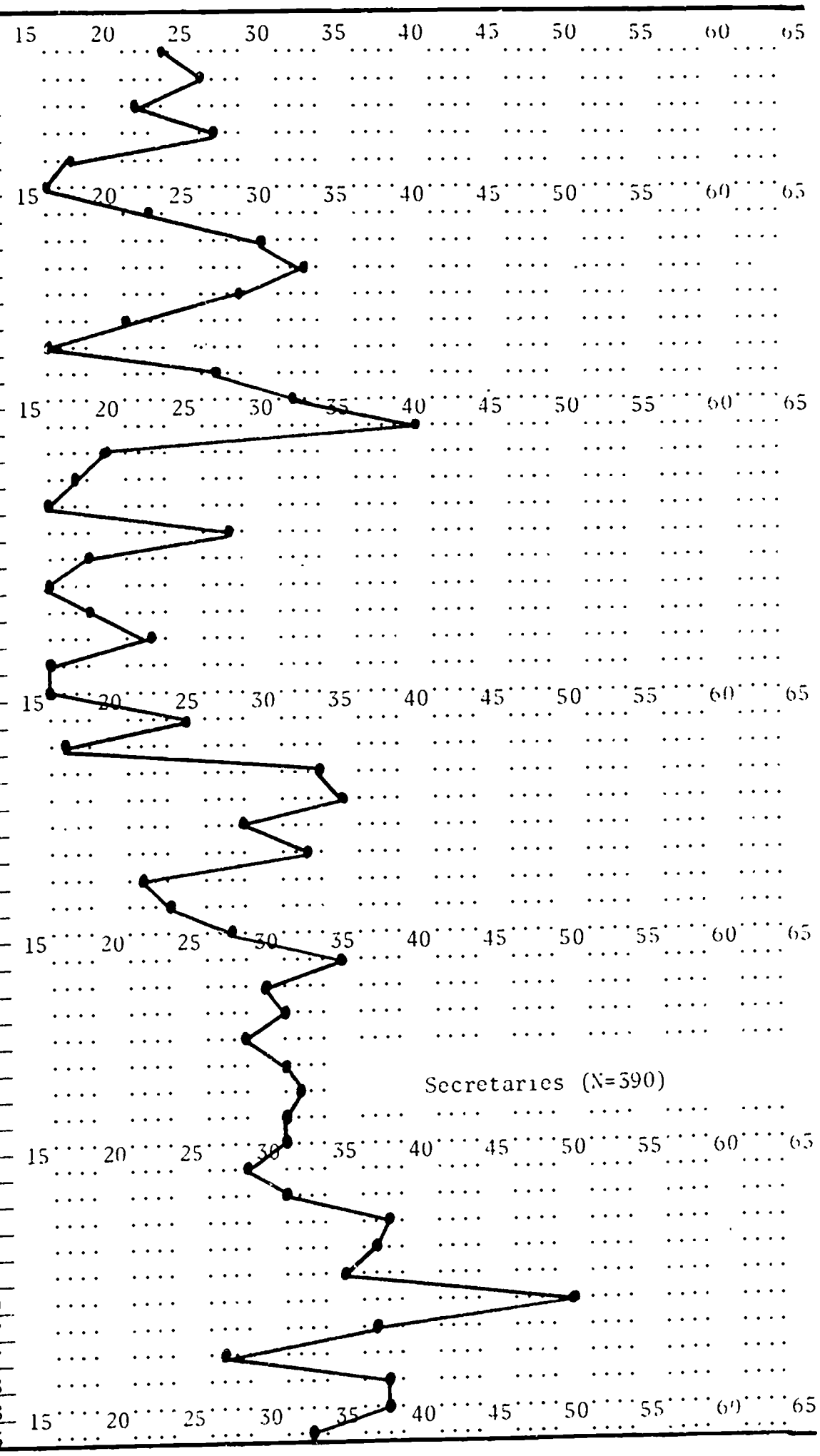
Marital Status (in percent)

Single	34
Married	53
Widowed	5
Divorced	8

Figure 36

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	24
Musician Performer	26
Entertainer	22
Model	27
Artist	18
Interior Decorator	13
Newswoman	23
English Teacher	30
Language Teacher	33
YWCA Staff Member	29
Director, Christian Education	21
Nun-Teacher	13
Guidance Counselor	27
Social Science Teacher	32
Elementary Teacher	40
Social Worker	20
Speech Pathologist	18
Psychologist	6
Librarian	28
Translator	19
Physician	15
Dentist	19
Medical Technologist	23
Chemist	-1
Mathematician	6
Computer Programmer	25
Engineer	17
Army-Enlisted	34
Navy-Enlisted	35
Army-Officer	29
Navy-Officer	33
Lawyer	22
Life Insurance Underwriter	24
Buyer	28
Business Education Teacher	35
Home Economics Teacher	30
Dietitian	31
Physical Education Teacher	29
Occupational Therapist	31
Physical Therapist	32
Public Health Nurse	31
Registered Nurse	31
Licensed Practical Nurse	29
Radiologic Technologist	31
Dental Assistant	38
Executive Housekeeper	37
Instrument Assembler	35
Secretary	50
Saleswoman	37
Sewing Machine Operator	27
Telephone Operator	38
Beautician	38
Stewardess	33



40
Academic Achievement

46
Femininity-Masculinity

Figure 37

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

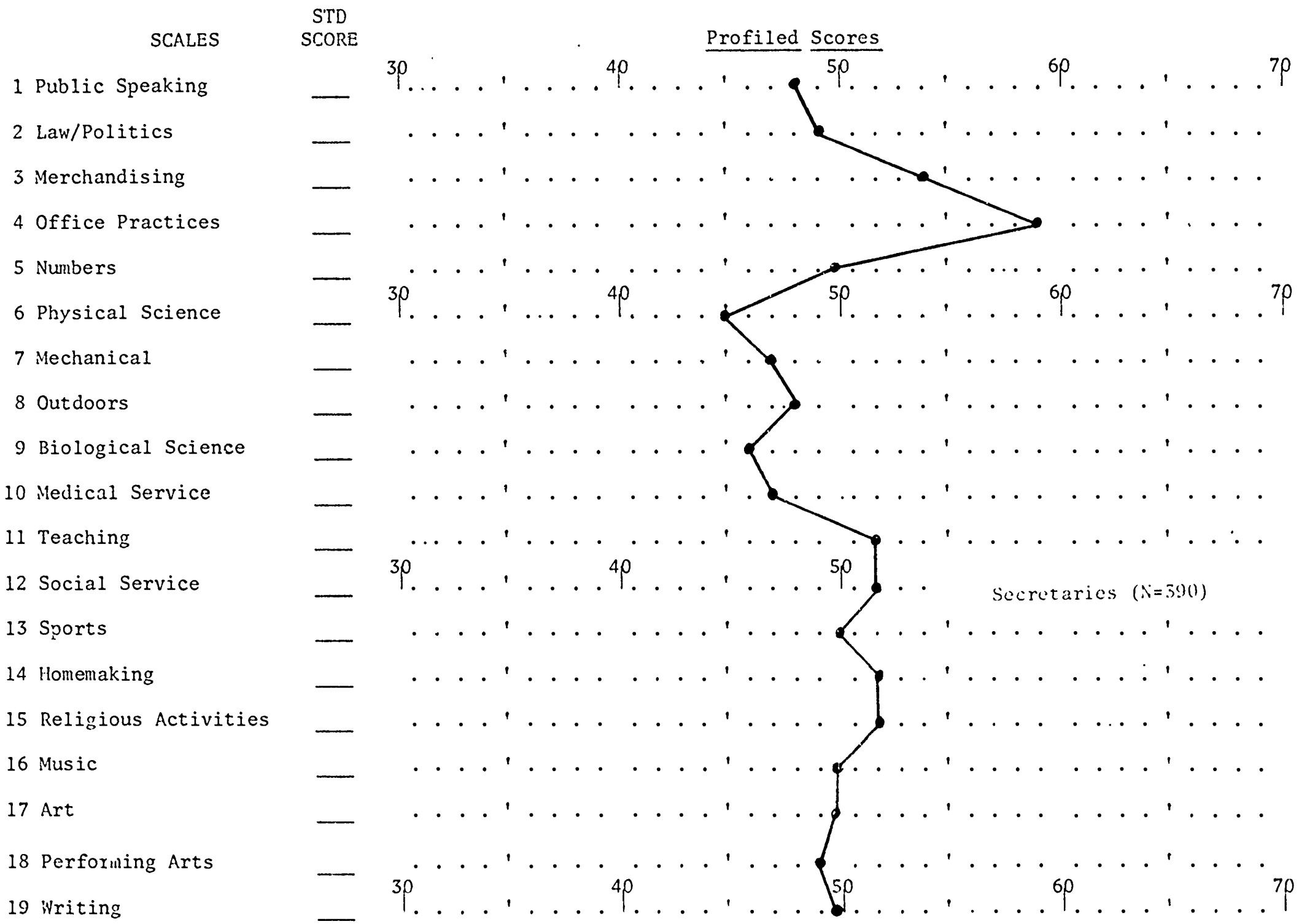
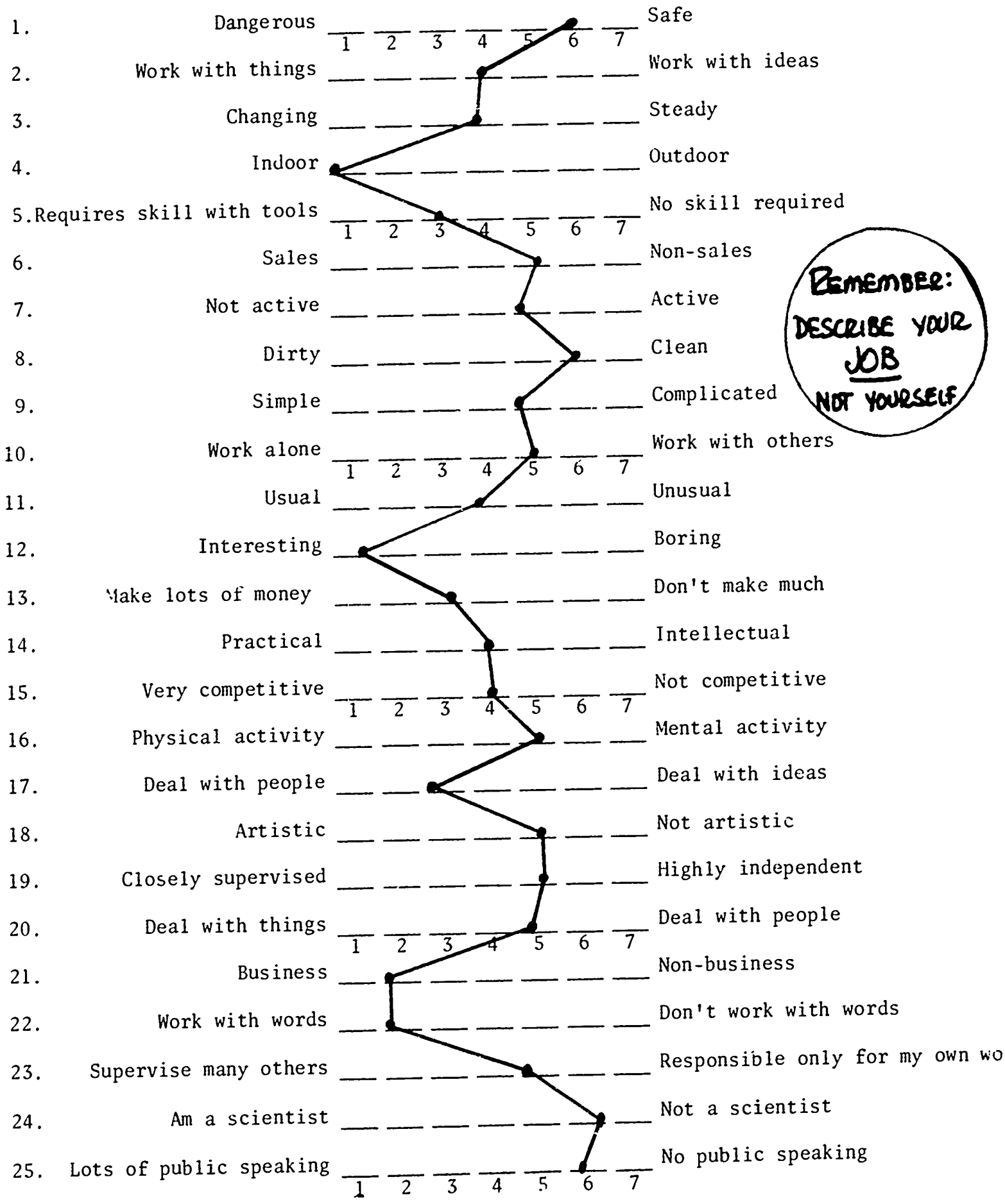


Figure 38

Job Description Checklist

Secretaries (N=390)



Chapter 18

The Sewing Machine Operators (N=295)

Most sewing machine operators are, obviously, employed by the apparrel industry. These women work on heavier, faster sewing machines than home models and utilize special attachments such as seam folders. Usually the operator works on some specified part of a garmet and then passes it on to another operator for the next step, although some operators do assemble complete garments. The physical demands of the job are not great but manual dexterity and speed are important since the workers are paid by the piece. No special training or educational level is required and workers are usually trained on the job (U. S. Dept. of Labor, 1966b).

Including women from this occupation in this study was important because so many women (over half a million in 1960) are employed in this field, yet compared with occupations included in this project, the sewing machine operators were viewed as representatives of all of those occupations containing women who do factory piece-work--women with little formal training, probably with little career commitment, who are working almost entirely because of economic necessity. Their closest parallel among the other groups here were the Instrument Assemblers.

Method

The Munsingwear Company cooperated in this study of sewing machine operators by permitting us to contact all of their women employed on a piece-work basis in seven plants in Alabama, Arkansas, Illinois, Minnesota, Oklahoma, Texas, and Wisconsin. Women under age 25 or who had less than three years' experience were eliminated, this left a potential sample of 1179.

In June of 1967, they were mailed the survey forms, about a month later follow-up reminders were sent to non-respondents. By December, 357 women (30 percent) had returned SVIBs and questionnaires. Of these, 50 were eliminated because they disliked their jobs, two were eliminated because they had less than three years of experience. The final criterion group contained 295 sewing machine operators.

The percent return was lower for this group than for most of the others. Undoubtedly this can be partially traced to the low level of education of the group, and their unfamilarity with tests and questionnaires. In addition, the company and union had just been through a bruising contract negotiation, and some suspicion was still present. Also, many workers had left their jobs--as part of the regular turnover--and did not participate for that reason.

Demographic Data

Table 55 contains the demographic data for the sewing machine operators. The average member was 45 years old, married, with three children; she had 10.5 years of formal education and 11 years of experience on her job. None had any training beyond high school.

The sewing machine operators' responses to the checklist about reasons for entering the field showed that the most prevalent answer was financial reasons, then because she liked the work itself and because she enjoyed the people she met. Only one other occupation studied, instrument assemblers, placed such a high emphasis on financial motivation. The two groups with the least education placed the most emphasis on the financial rewards of their jobs, suggesting that education does liberate the educated. The more education a woman has, the freer she is to choose an intrinsically satisfying occupation from among the many which would supply her financial needs.

Results

Figure 39 shows the mean SVIB profile for the sewing machine operators on the Occupational Scales. Surprisingly, they scored high (A) on a number of scales--Elementary Teacher, Saleswoman, Dental Assistant, Instrument Assembler, Telephone Operator, and Beautician--besides their own scale. None of these occupations are highly professional; otherwise they represent quite a variety.

The reason for these similarities may be related to the sewing machine operator's scores on the SVIB Basic Scales (see Figure 40). They scored high on the Office Practices scale, which has already emerged as a component of the interests of many nonprofessional groups, and also on the Homemaking and Religious Activities scales, which are undoubtedly related to the avocational side of their lives. Common interests in these three areas probably account for the sewing machine operator's high scores on the other nonprofessional women's scales. In addition, the sewing machine operators had no high scores on scales which seemed directly related to their job duties, even their score on the Mechanical scale was low.

The sewing machine operators' average responses to the Job Description Checklist are in Figure 41. They described their work as dealing with things, not people nor ideas. They saw their work as "practical," "usual," and "closely supervised;" they also described their work as requiring little work with words or public speaking.

The SVIB items which differentiated these women from WIG_{total} reflected their interests in clerical, religious, and homemaking activities (see Appendix D); they also rejected items related to aesthetics, verbal, or impulsive activities.

Conclusions

The sewing machine operator criterion group may have been the most homogeneous of all the groups studied. Also, they scored high on a number of other nonprofessional occupational scales, and they had no job related peaks on the Basic Scales. Though every woman in the group expressed satisfaction with her job, many of them were attracted initially by extrinsic factors such as pay. A large number of women in this group may be forced, because of their low educational level, to work because of financial pressures, and they turn to factory piecework at least partially because they have no dominant pattern of interests beyond the usual domestic concerns. The data do suggest, however, that many of these women would prefer clerical jobs, but they lack the education and training to secure them.

Table 55

Demographic Data on the Sewing Machine Operator Criterion Group
(N=295)

	Mean	SD	Range
Age (years)	45	8.8	22-65
Education (years)	10	1.7	3-19
Experience (years)	11	5.8	3-41
Number of children (married subjects)	2.6	1.7	0-9

Marital Status (in percent)

Single	6
Married	79
Widowed	8
Divorced	6

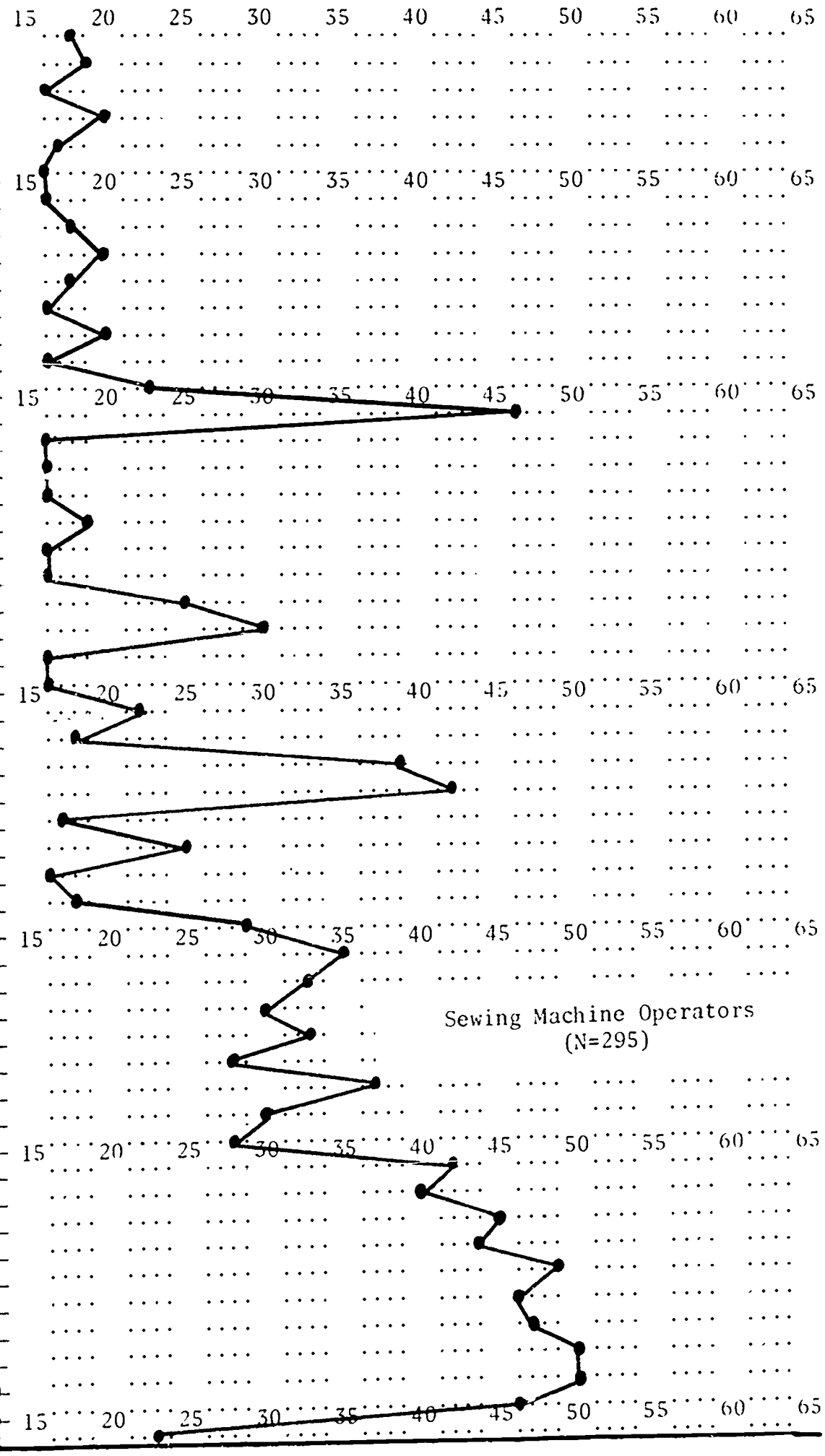
Geographical Location (in percent)

New England	--
East	--
South	21
Southwest	47
Midwest	32
Northwest	--
California	--

Figure 39

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	18
Musician Performer	19
Entertainer	12
Model	20
Artist	17
Interior Decorator	4
Newswoman	12
English Teacher	18
Language Teacher	20
YWCA Staff Member	13
Director, Christian Education	16
Nun-Teacher	20
Guidance Counselor	16
Social Science Teacher	23
Elementary Teacher	46
Social Worker	11
Speech Pathologist	5
Psychologist	6
Librarian	19
Translator	11
Physician	13
Dentist	25
Medical Technologist	30
Chemist	0
Mathematician	7
Computer Programmer	22
Engineer	18
Army-Enlisted	39
Navy-Enlisted	42
Army-Officer	17
Navy-Officer	25
Lawyer	12
Life Insurance Underwriter	18
Buyer	29
Business Education Teacher	35
Home Economics Teacher	33
Dietitian	30
Physical Education Teacher	33
Occupational Therapist	28
Physical Therapist	37
Public Health Nurse	30
Registered Nurse	28
Licensed Practical Nurse	42
Radiologic Technologist	40
Dental Assistant	45
Executive Housekeeper	44
Instrument Assembler	49
Secretary	46
Saleswoman	47
Sewing Machine Operator	50
Telephone Operator	50
Beautician	46
Stewardess	23



35
Academic Achievement

41
Femininity-Masculinity

Figure 40

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

SCALES	STD SCORE
1 Public Speaking	___
2 Law/Politics	___
3 Merchandising	___
4 Office Practices	___
5 Numbers	___
6 Physical Science	___
7 Mechanical	___
8 Outdoors	___
9 Biological Science	___
10 Medical Service	___
11 Teaching	___
12 Social Service	___
13 Sports	___
14 Homemaking	___
15 Religious Activities	___
16 Music	___
17 Art	___
18 Performing Arts	___
19 Writing	___

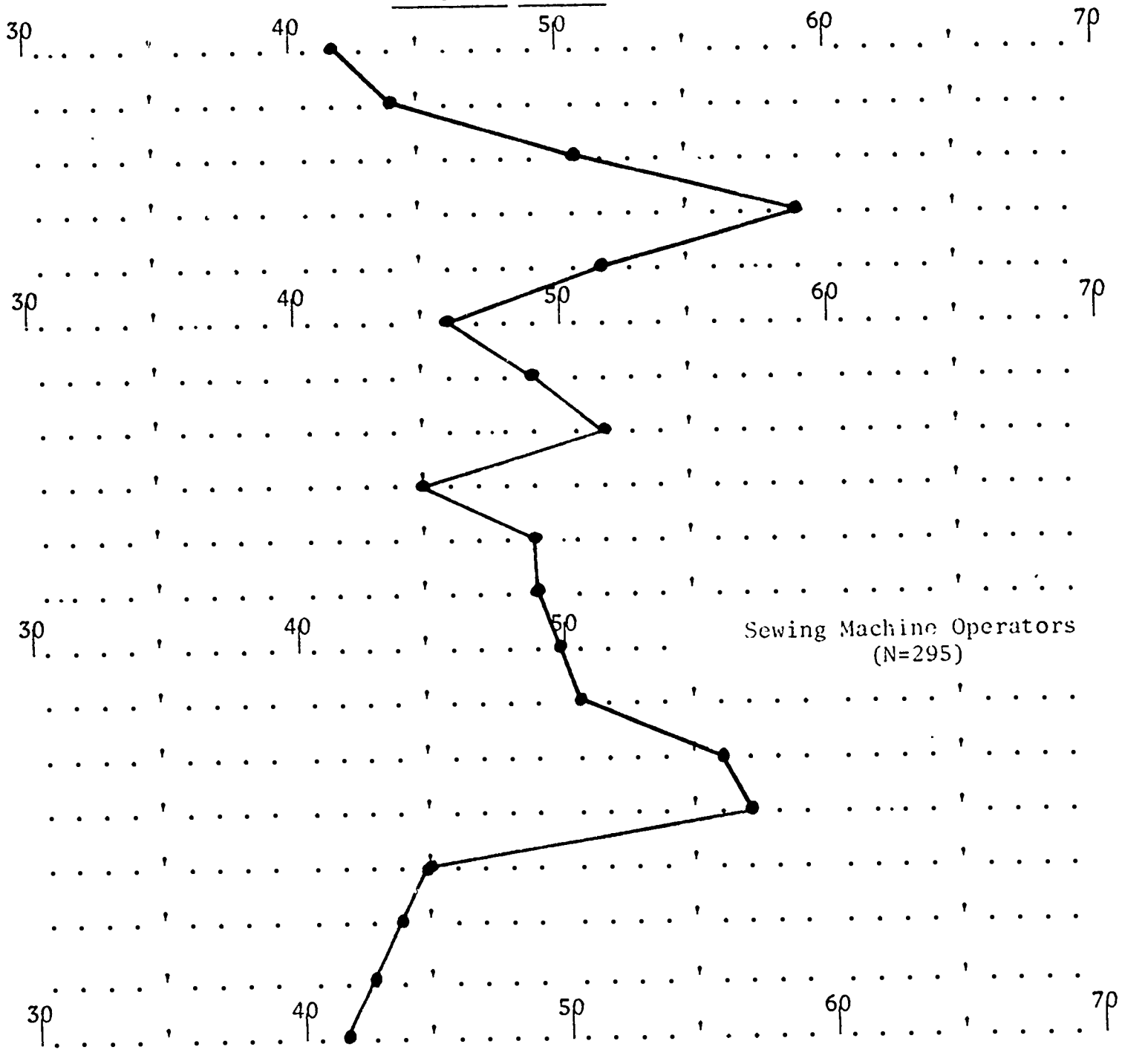
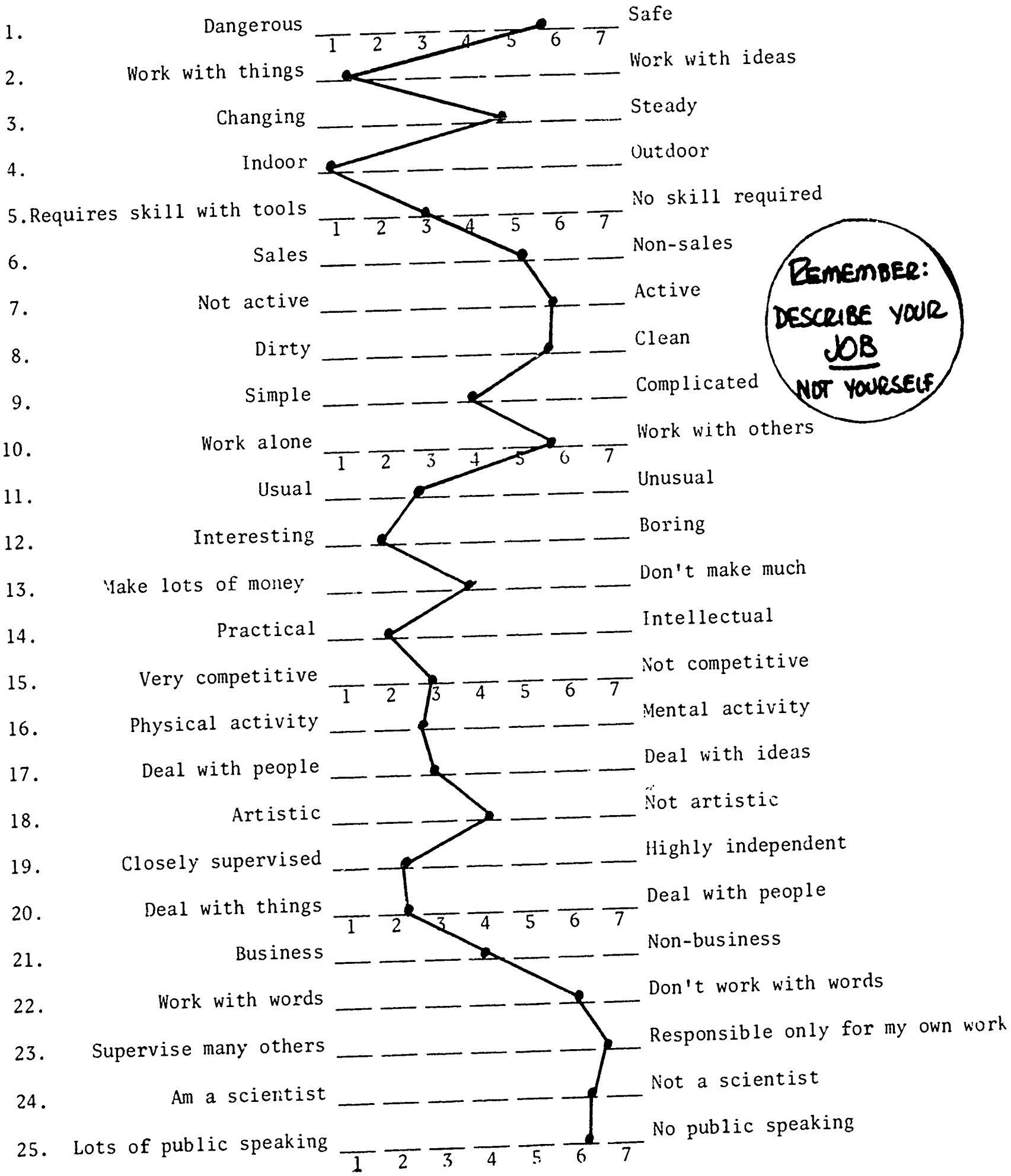


Figure 41

Job Description Checklist

Sewing Machine Operators (N=295)



Chapter 19

The Stewardesses

The stewardess is a young lady hired by the airlines to provide for the care and feeding, comfort and safety of its passengers. The airlines set rigorous standards of appearance, and require irregular hours and efficient service in return for the glamourous life of travel they offer. Stewardesses are usually trained by the airlines in a matter of five or six weeks. The educational requirements vary from a high school diploma to two years of college and proficiency in a foreign language. The prospects for marriage in connection with this occupation are extremely good and job turnover is high (U. S. Dept. of Labor, 1966b). A more popularized account of life as a stewardess has recently been published (Coffee, Tea, or Me? by Trudy Baker and Rachel Jones, New York: Bartholomew House Ltd, 1967) and, if it can be accepted as a credible source, suggests that many of the popular stereotypes about stewardesses are at least partially true. It is one of the liveliest possible occupations for young women.

Method

The stewardess sample was obtained through the cooperation of a large international airline, Northwest Orient Airlines. All 961 of their American stewardesses were included in the initial mailing, which went out in May of 1966; a follow-up was sent in June. Eventually, 680 (71 percent) of the women returned completed SVIBs, 144 were not included in the criterion group because they indicated some dissatisfaction with their jobs, and 136 were eliminated because they did not meet the experience criteria. For stewardesses, only 6 months of experience were required for inclusion because the turnover rate among stewardesses is so high that to require three years, as we did with other groups, would have left only a small and nonrepresentative criterion group. The final sample included 440 stewardesses.

Demographic Data

Table gives a description of the criterion group. The typical airline stewardess in this sample was 24 years old and single. (At the time the data were collected, being single was a condition of employment on most airlines. As this report is being prepared, two years later, that restriction has been lifted on many airlines.) The typical stewardess had 13 years of education and almost three years of experience, though, for the latter figure, the average is misleading. The median job tenure was just over 14 months. Nine percent had bachelor's degrees, three percent had graduated from business schools, three percent had completed some paramedical training program, and six percent had other post high school training. Thus, one in five had some significant training beyond high school. While most were in their twenties, the oldest was 46 and began her employment when commercial aviation was quite young.

Results

The average SVIB profile of the airline stewardesses is in Figure 42 They had no high (A or B+) scores on any Occupational Scales other than the Stewardess scale, indicating their interests do not coincide very closely with any of the other occupations. Their highest scores, which were not very high, were on the scales for Model, Musician Performer, the medical service occupations, and Beautician. As their work requires an interest in grooming and appearing before the public, their scores on the Model, Musician Performer and Beautician scales probably reflect those factors.

On the Basic Scales, their highest score was on the Merchandising scale with the Sports, Art and Performing Arts scales also high. The stewardesses did not score very low on any of the Basic Scales, partially because as a group, they marked fewer "Dislikes" than any other occupation.

A majority of the items which differentiated the stewardess group from Women-in-General are scored positively (see Appendix D), again a reflection of the high percentage of 'Like' responses among these young women. Appropriately, they endorsed Airplane pilot as an occupation, "Work in which you move from place to place," "Starting conversations with a stranger," and "Entertaining others."

Conclusions

Airline stewardesses are young single women who are willing to meet new situations with great flexibility. They have more confidence in their verbal and social skills than any of the other nonprofessional groups. Since the members of this group were considerably younger than those in any of the other groups studied, some of these patterns may be related to their youth. But even among the young, the stewardesses undoubtedly are an identifiable subgroup, one is not likely to mistake them, by their interests, for sewing machine operators.

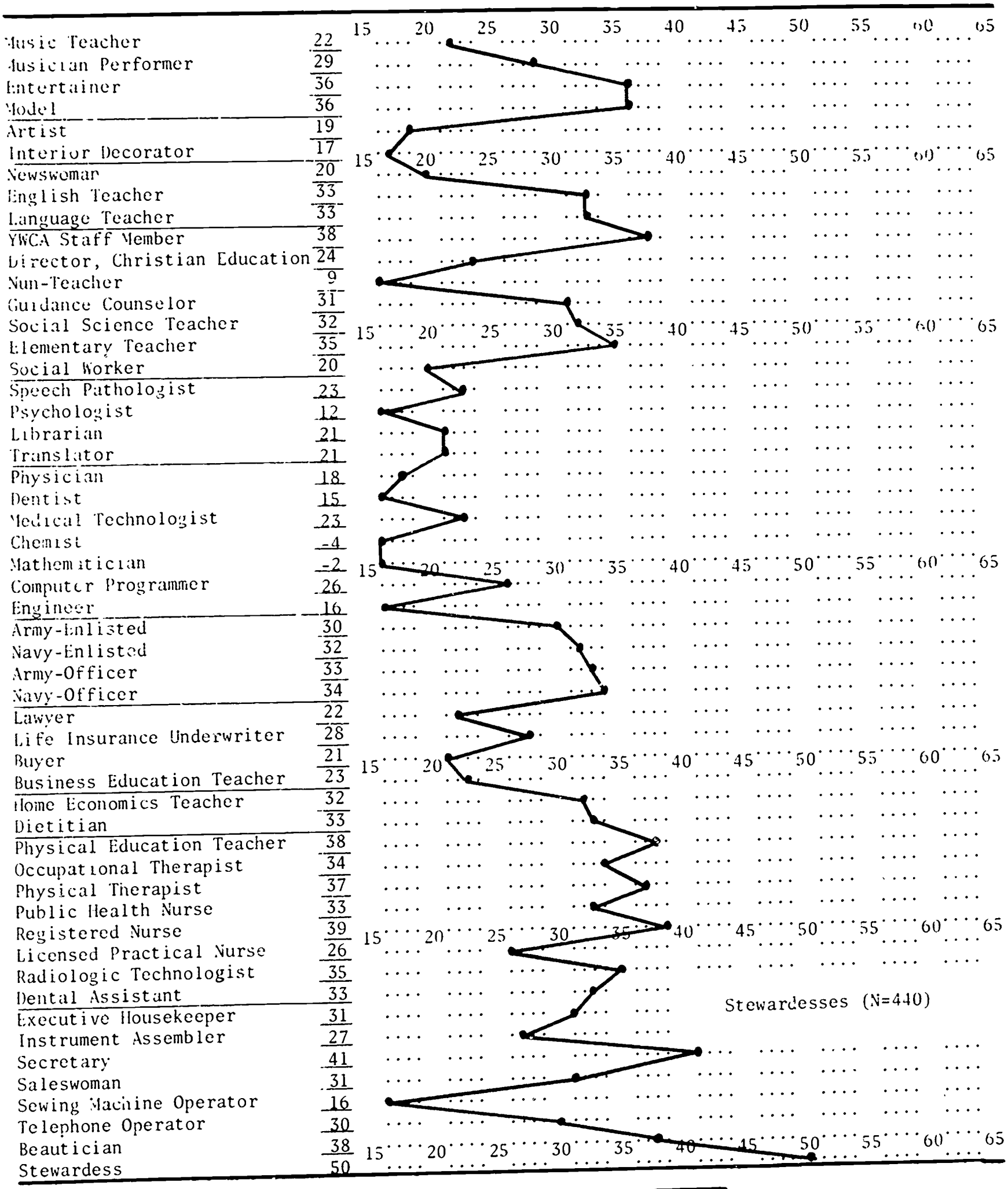
Table 56

Demographic Data on the Stewardess Criterion Group
(N=440)

	Mean	SD	Range
Age (years)	24	3.7	20-46
Education (years)	13	1.3	10-17
Experience (years)	3	3.1	1-20
Marital Status (in percent)			
Single	100		
Geographic Location (in percent)			
New England	--		
East	2		
South	1		
Southwest	--		
Midwest	71		
Northwest	26		
California	--		

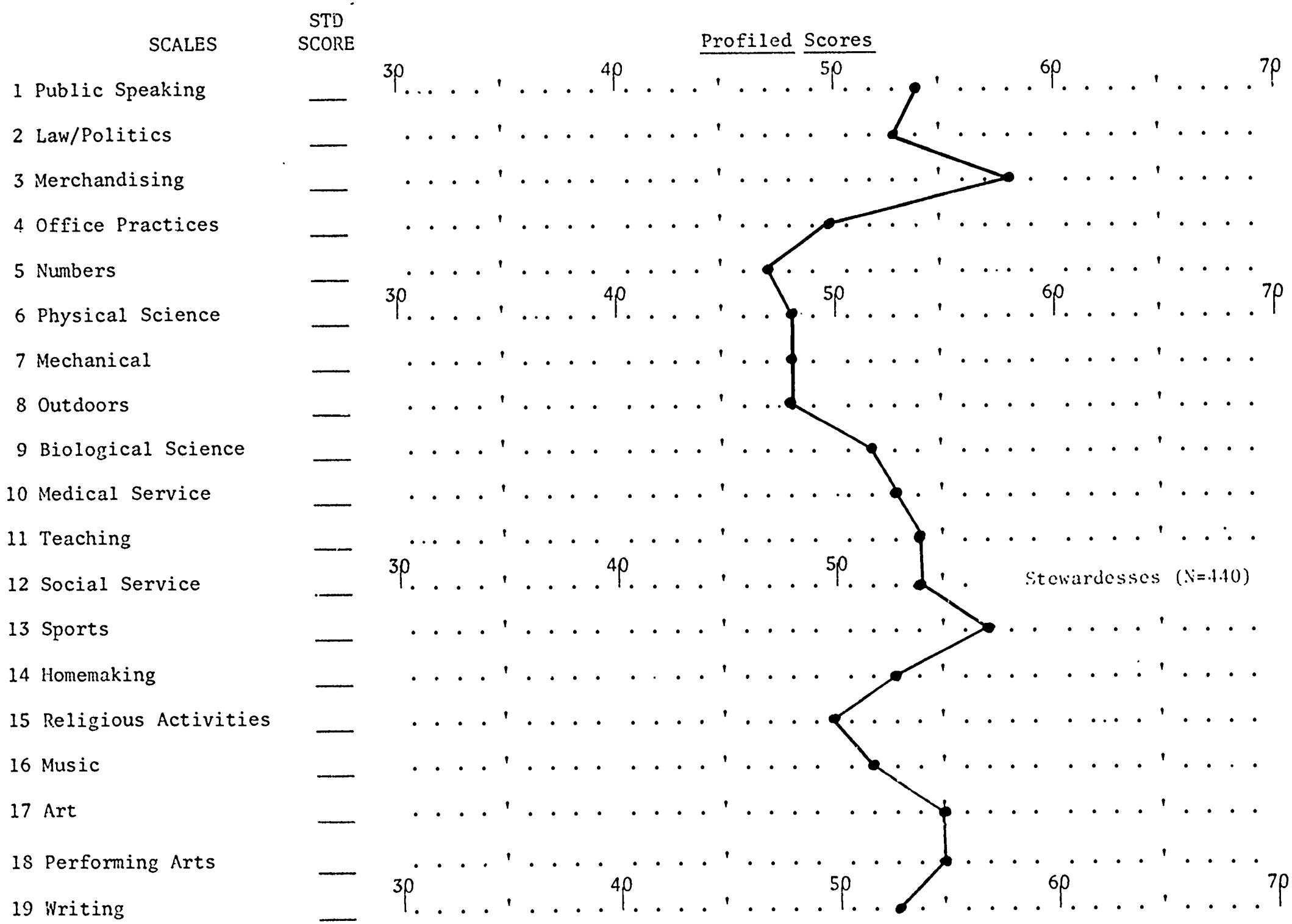
Figure 42

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women



NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN



Chapter 20
The Telephone Operators

The central office telephone operator's job is becoming more complex. Fewer of her calls are simple requests for a number in a distant city, as those calls can be dialed directly by the customer. Today her duties involve locating specific people, arranging conference calls for parties in several different locations, recording special billing instructions, instructing or helping customers who are unfamiliar with telephoning techniques, handling calls from coin telephones, and expediting emergency calls. To accomplish these tasks, she needs a pleasant manner, the ability to cope with procedural detail, and the ability to perform several mental and motor tasks at the same time. For instance, one call may end while another is beginning, requiring the operator to disconnect the line and record the time on the completed call without a pause in her conversation with the customer placing the new call.

Telephone operators are usually selected from high school graduates on the basis of clerical skill. They are trained by the telephone companies in the operation of the switchboard and the procedures for various types of calls. The initial training usually lasts one to three weeks. Many companies have extensive in-service training programs by means of which an operator's training continues after she joins the regular working force (U. S. Dept. of Labor, 1966b).

The occupation employed 325,000 women in 1965, including PBX operators in businesses and institutions, and although direct distance dialing is increasing, the need for operators to place difficult types of calls will not diminish in the near future. Because of this continued demand for operators, and because the occupation requires a fairly unique collection of clerical, manual, and personal skills, and because a woman can enter with virtually no training, the telephone operators' sample is an especially appropriate occupation for this study.

The Northwestern Bell Telephone Company office helped us by providing two separate samples, one from Minnesota and another from Colorado. In both, the samples were representative of the rural-urban split. For instance, two-thirds of the operators in Minnesota are in the Twin Cities area, 44 percent in Minneapolis and 22 percent in St. Paul, and the sample had these same proportions. The samples included only those with three years,or more, experience.

In August of 1966, 200 Minnesota telephone operators were asked to participate in this study; about a month and a half later, follow-up reminders were sent to non-respondents.

In October the procedure was repeated with 200 Colorado telephone operators. By February, 1967, 204 (51 percent) had returned the materials. The final criterion group contained only 129 telephone operators, 62 respondents were dropped because they expressed lack of enthusiasm for their occupation, and three were dropped because they had less than three years of experience at their jobs.

Demographic Data

Table 57 describes the criterion group of telephone operators. The average telephone operator was 38 years old, married, with two children. She had the equivalent of a high school education and 13 years of experience as a telephone operator.

Among this sample of telephone operators, the most frequently checked reason for entering the occupation was, as in most of the other occupations, "I enjoy the work," (85 percent). The telephone operators were unique in that many more of them also checked the response "Someone influenced me to try it," (65 percent) contrasted with, for example, dental assistants (54 percent) and the sewing machine operators (20 percent). Apparently the telephone company's policy of urging employees to recruit new employees pays off.

Results

The mean SVIB profile for the telephone operators is in Figure 44 They scored high (A) on three Occupational Scales other than their own: Elementary Teacher, Secretary, and Instrument Assembler. Again, these scores can probably be explained by looking at their high scores on the Basic Scales (Figure 45): Office Practices, Homemaking, and Religious Activities. Like sewing machine operators, they share interests in clerical, homemaking, and religious activities with a number of other occupations, yet apparently have no particularly unique theme of interests which sets them off from other groups.

Figure 46 contains the mean responses of the telephone operators to the Job Description Checklist, and there are some interesting relationships there. The telephone operators described their jobs as less active than any of the other groups, probably reflecting their ties to their switchboards--one cannot simply walk away and leave them unattended. Similarly, they rated their work as involving more mental than physical activity; but, though mental activity prevails, they said they deal with people and things more than with ideas.

They regarded their work as more closely supervised than did any other occupation, and reported their work as very business-oriented.

The SVIB items which differentiate telephone operators from Women-in-General (Appendix D) reflected their clerical, religious, and homemaking interests, and dislike of professionally oriented activities.

Conclusions

While it is possible to differentiate the interests of telephone operators from those of women in other occupations, they do share a core of clerical, homemaking and religious interests with several other groups. In their interests, they resembled secretaries and possibly many of them would enjoy that work, given adequate training and motivation.

Table 57

Demographic Data for the Telephone Operator Criterion Group
(N=129)

	Mean	SD	Range
Age (years)	38	8.0	24-55
Education (years)	12	1.0	8-14
Experience (years)	13	6.8	3-36
Number of children (married subjects)	2.1	1.6	0-7

Marital Status (in percent)

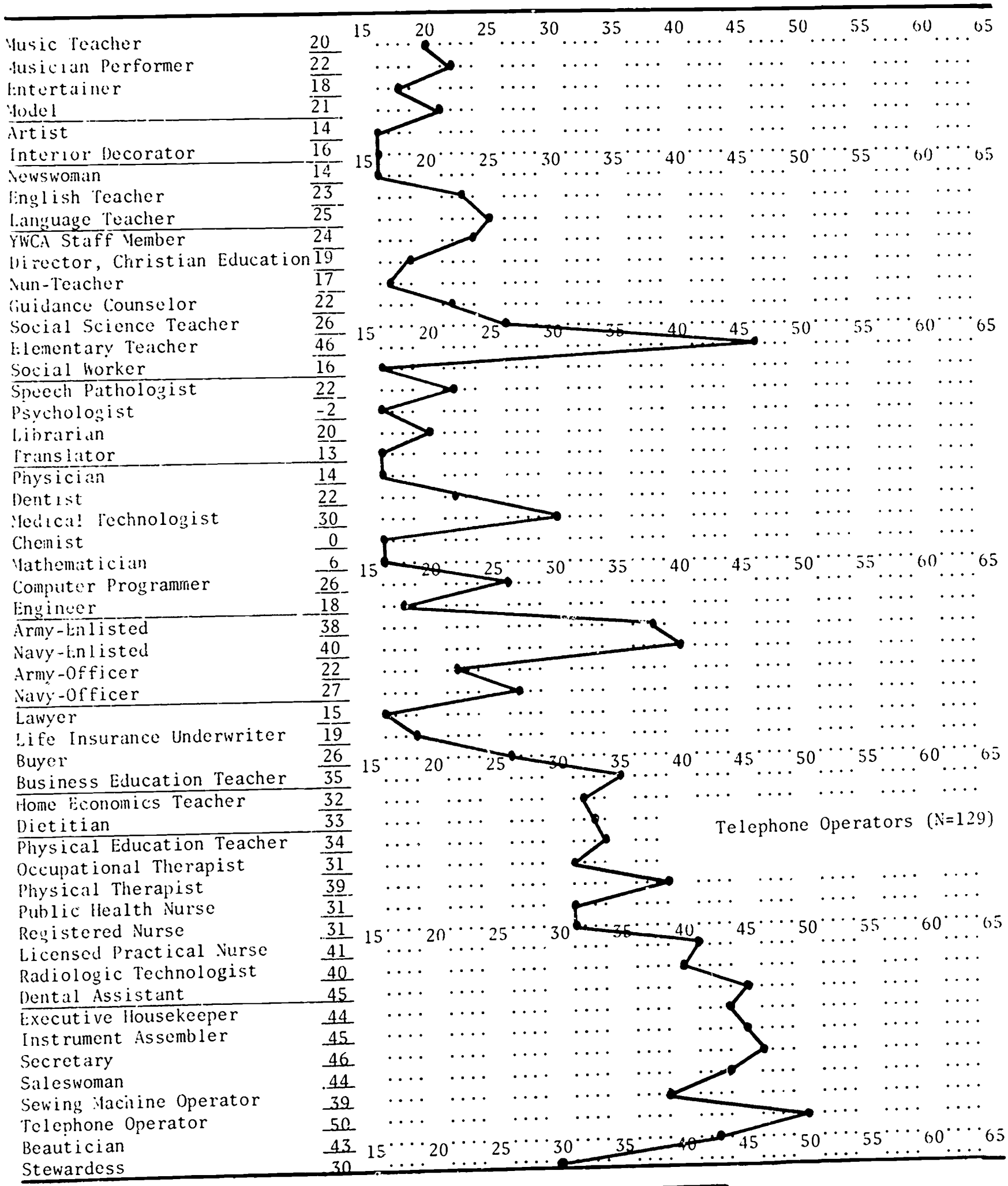
Single	9
Married	75
Widowed	13
Divorced	3

Geographical Location (in percent)

Southwest (Colorado)	61
Midwest (Minnesota)	39

Figure 44

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women



NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

SCALES	STD SCORE
1 Public Speaking	___
2 Law/Politics	___
3 Merchandising	___
4 Office Practices	___
5 Numbers	___
6 Physical Science	___
7 Mechanical	___
8 Outdoors	___
9 Biological Science	___
10 Medical Service	___
11 Teaching	___
12 Social Service	___
13 Sports	___
14 Homemaking	___
15 Religious Activities	___
16 Music	___
17 Art	___
18 Performing Arts	___
19 Writing	___

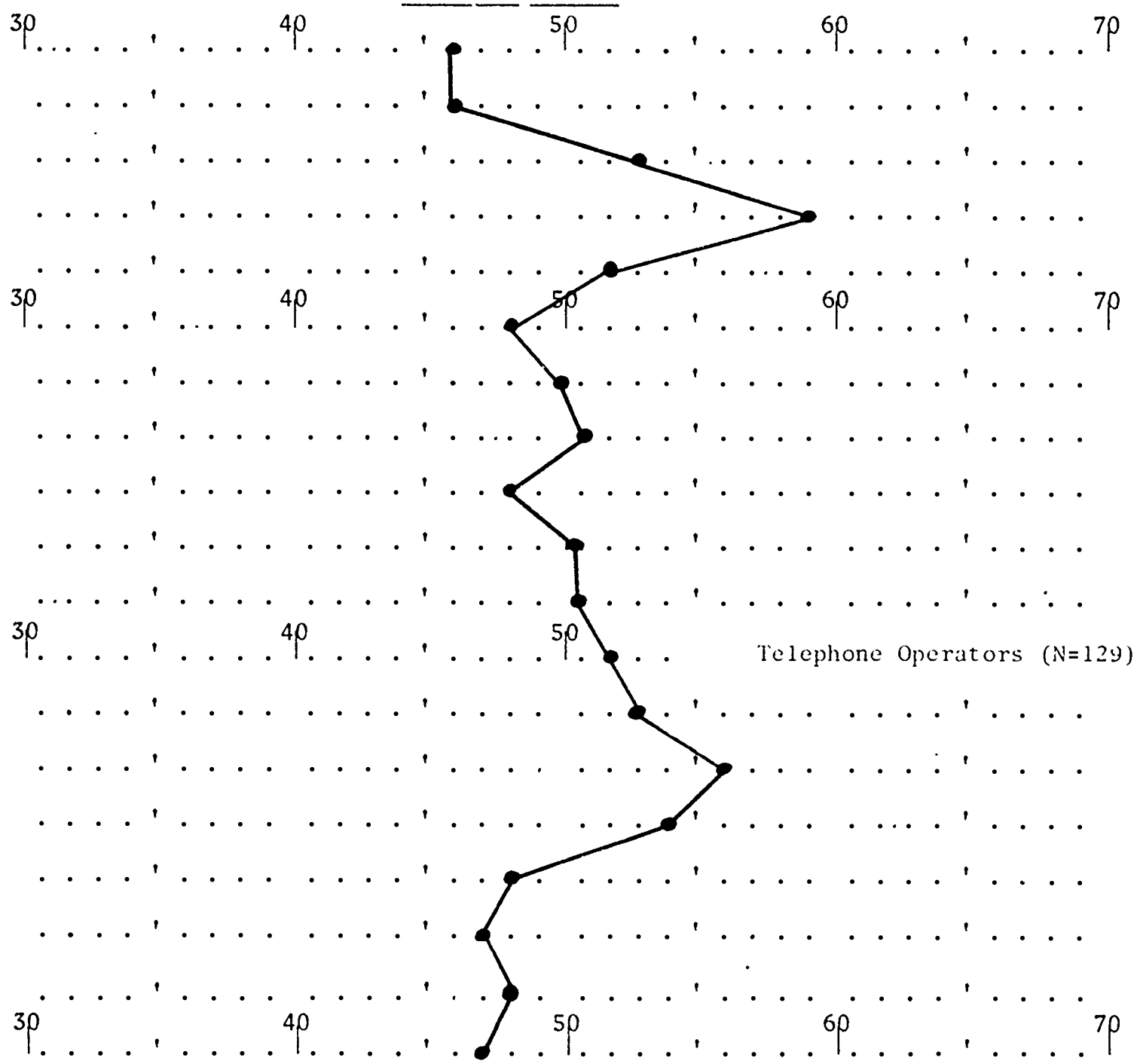
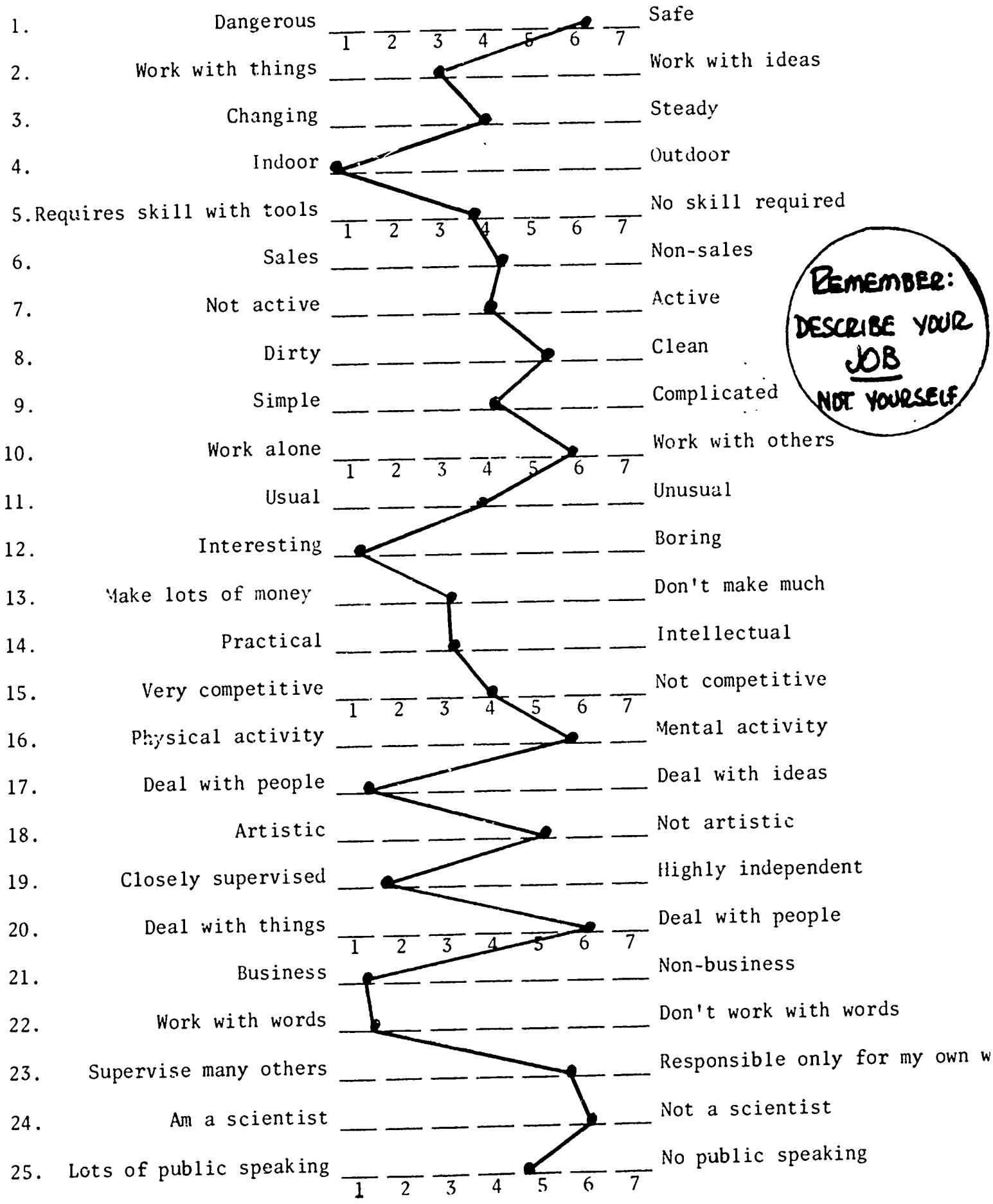


Figure 46

Job Description Checklist

Telephone Operators (N=219)



Chapter 21

Army Enlisted Personnel

A sample of WAC enlisted personnel were included in this project for two reasons: first, a military occupation is a novel career for women and including this sample will help diversify our coverage in this project, and second, we were attempting to find occupations at the nonprofessional level which would include supervision of others. The WAC sample fulfilled these goals.

The range of activities open to the enlisted WACs is, with the exception of the combat arms, almost as wide as the entire Army. They are involved in air operations, drafting maps, the finance offices, photography, food service, various laboratory operations, public relations, data processing services, supply operations, medical, dental, and optical services, electronics labs, and transportation offices. With the rotating system of assignments that the Army has, many of these women had experience in many of these areas. Of course, as they move up through the ranks, their supervisory responsibilities increase, no matter what area they are working in.

Because of the method of selection, most of those studied here were essentially managers, usually office managers, and their preferences reflected this.

The Army as a career for women is a unique choice, and the answers of these women as to why they chose their occupation are of interest: The most frequently checked reasons were not, as opposed to other occupations, "I enjoy the work" and "I like the people with whom I come in contact," although 50 percent of the sample checked those; rather, the most frequent answer was "good opportunities for advancement," (57 percent). The WACs were also unique in not checking "The hours and location fit in well with my homelife," which is reasonable as few of them are married, and their work does at times require odd hours, and many moves. More of them also wrote in answers such as "I wanted to do something very different," "It seemed to be an adventure-some thing to do," "To break away from home and home ties." There were other written-in answers which fell into a "service towards country" category. Many of them chose it for reasons that they considered essentially patriotic and were fulfilling a need to feel useful to their country. Several mentioned the possibility of travel, and of continuing education, as reasons for making a career of the army. In general, their reported motives in choosing their occupation were different from most women, and seemed to center on selection of a "non-routine" career.

Sample

Because we wished to include women who were experienced in their work and who had made a commitment to that occupation, only the senior noncommissioned officers were included here. Specifically, forms were mailed to all women rated E-7 or above, the top rated sergeants. There were 427 women in this group; 241 replies were received, or 56 percent; after eliminating those who disliked their work 214 were used in the final sample.

Demographic Information

The demographic information on the Army enlisted personnel is summarized in Table 58. The average WAC in this sample was 42 years old, but the range was 26-62. On the average, they had been in the Army for 14 years; as retirement is mandatory after 30 years of service that was the upper limit. Virtually all of them had high school education, many had some college work, and one out of eight had a college degree.

These women can get married, but if they have children, they must leave the service. Three-fourths of them were still single, and only 12 percent were currently married. Several of them indicated that they had taken on the responsibility of foster children, sometimes foreign orphans, but the specific arrangements were quite varied.

The percent in each rank is also given in Table 58.

Job Description

The average of the answers given by the WACs to the Job Description Checklist are presented in Figure 49. Two items are worthy of note here: "Closely supervised" versus "Highly independent," "Supervise many others," versus "Responsible only for my own work." One's first impression, that the enlisted women might feel closely supervised and responsible only for their own work is clearly inadequate; these noncommissioned officers, who are indeed in the top of the enlisted structure, feel the weight of responsibility and believe that they enjoy the relative day-to-day freedom that comes with that charge. These answers do reflect the managerial aspects of the enlisted WAC sergeant's daily life.

Scores on the SVIB profile

The WAC sample had no high scores on the other Occupational Scales, indicating that none of the existing scales adequately reflects their interests, and suggests that a scale for this occupation would be helpful.

Results

The mean scores of the Army Enlisted personnel are given in Figure 47. Their highest scores were all in the cluster of Military scales, indicating common interests with these samples. Their only other moderately high scores were on the Physical Therapist and Radiologic Technologist scales.

On the SVIB Basic Interest Scales, reported in Figure 48, they had their highest mean scores on the Mechanical and Social Service scales, which is an unusual combination. Their lowest score was on the Homemaking scale, and probably reflects their disregard for the usual types of domestic concerns. Actually, none of their mean scores on the Basic Scales were particularly high, suggesting that they had no single dominant cluster of interests, at least among the areas covered by these scales.

As was pointed out earlier, the WACs did select those items dealing with management more often than the Women-in-General, and that aspect of their preferences should be emphasized.

Conclusions

The Army women studied here included only the higher ranking non-commissioned officers. Although they had no single high score on the Basic Interest Scales, it was possible to develop an empirical scale which successfully discriminated between them and Women-in-General, and most of the other occupations covered in this report. They did show some similarity in interests with the other military occupations included on the women's profile.

The WACs reported some unusual reasons for entering into this career--such as desire for travel, patriotism, and a desire to move up the ladder of command, and, therefore, responsibility. In general, this sample probably represents the managerial segment of the nonprofessional woman's world.

Table 58

Demographic Data for the Army Enlisted Personnel

	Mean	SD	Range
Age (years)	42	7.1	26-62
Education (years)	13	1.5	8-18
Experience (years)	14	6.4	3-30

Marital Status (in percent)

Single	74
Married	12
Widowed	1
Divorced	13

Geographic Location (in percent)

New England	8
East	19
South	22
Southwest	10
Midwest	25
Northwest	4
California	13

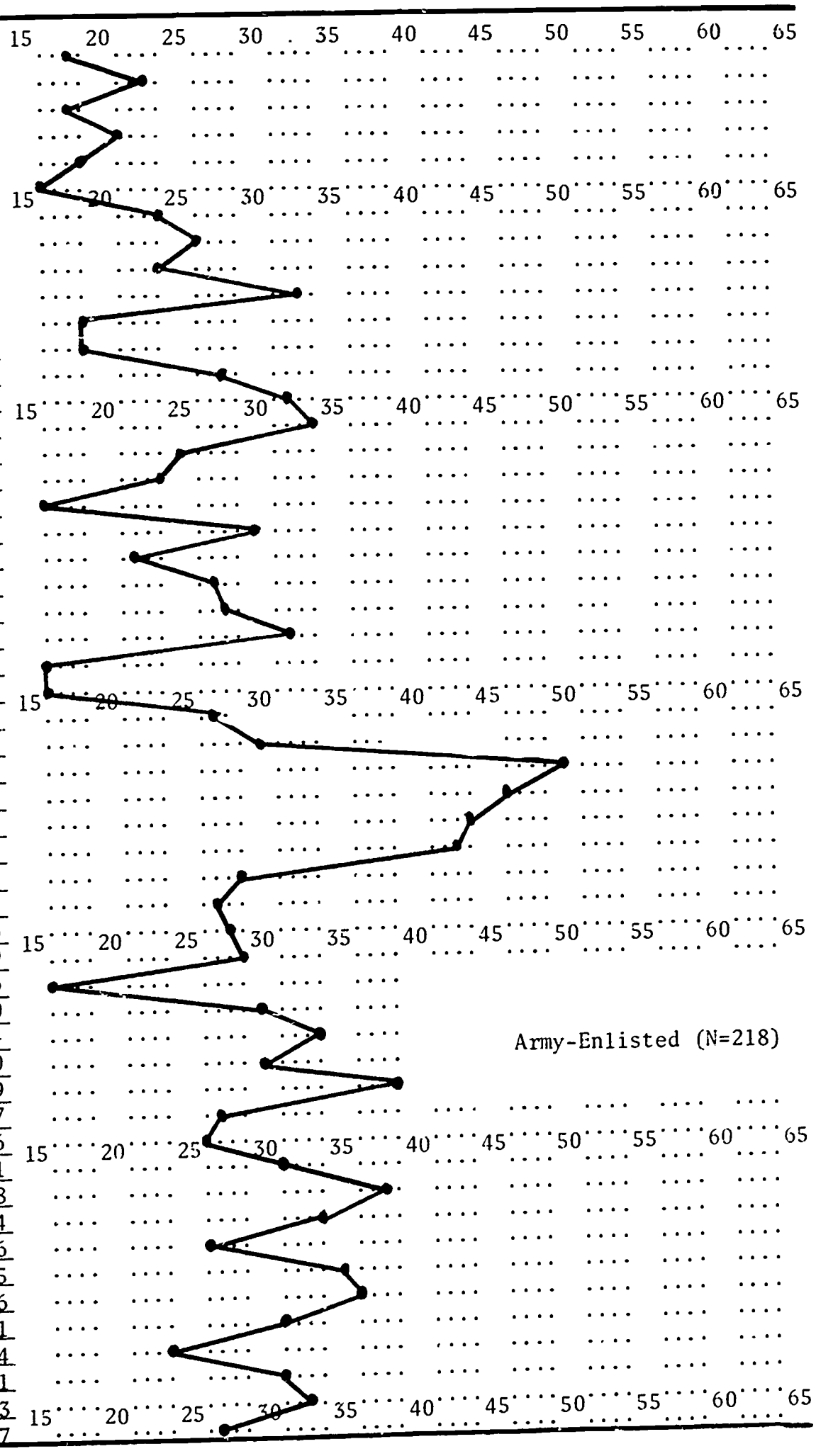
Rank (in percent)

E-7	79
E-8	20
E-9	2

Figure 47

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

Music Teacher	18
Musician Performer	23
Entertainer	18
Model	21
Artist	19
Interior Decorator	9
Newswoman	24
English Teacher	26
Language Teacher	24
YWCA Staff Member	33
Director, Christian Education	19
Nun-Teacher	19
Guidance Counselor	28
Social Science Teacher	32
Elementary Teacher	34
Social Worker	25
Speech Pathologist	24
Psychologist	13
Librarian	30
Translator	22
Physician	27
Dentist	28
Medical Technologist	32
Chemist	14
Mathematician	16
Computer Programmer	27
Engineer	30
Army-Enlisted	50
Navy-Enlisted	46
Army-Officer	44
Navy-Officer	43
Lawyer	29
Life Insurance Underwriter	27
Buyer	28
Business Education Teacher	29
Home Economics Teacher	16
Dietitian	30
Physical Education Teacher	34
Occupational Therapist	30
Physical Therapist	39
Public Health Nurse	27
Registered Nurse	26
Licensed Practical Nurse	31
Radiologic Technologist	38
Dental Assistant	34
Executive Housekeeper	26
Instrument Assembler	35
Secretary	36
Saleswoman	31
Sewing Machine Operator	24
Telephone Operator	31
Beautician	33
Stewardess	27



45
Academic Achievement

38
Femininity-Masculinity

Figure 48

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

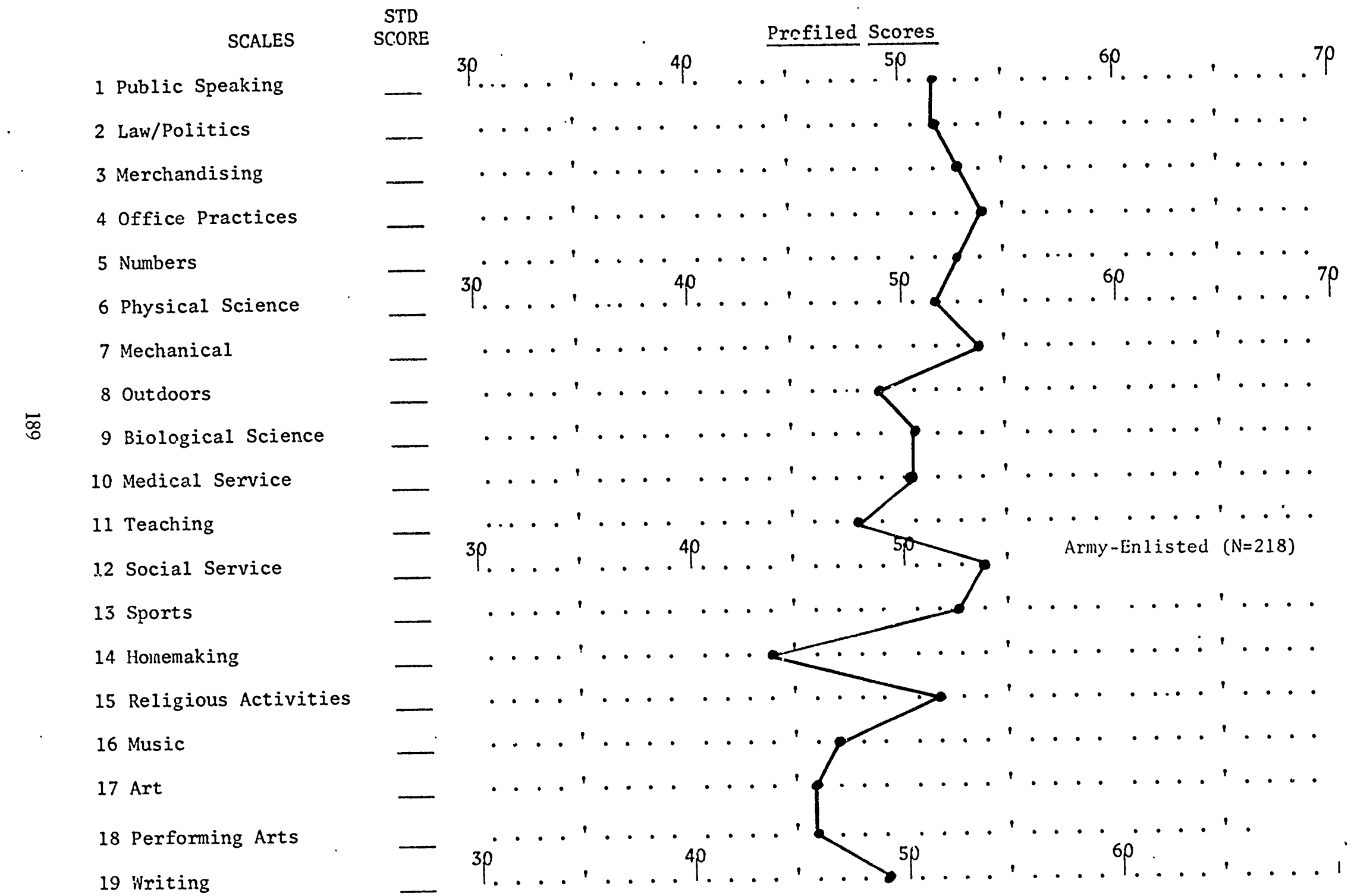
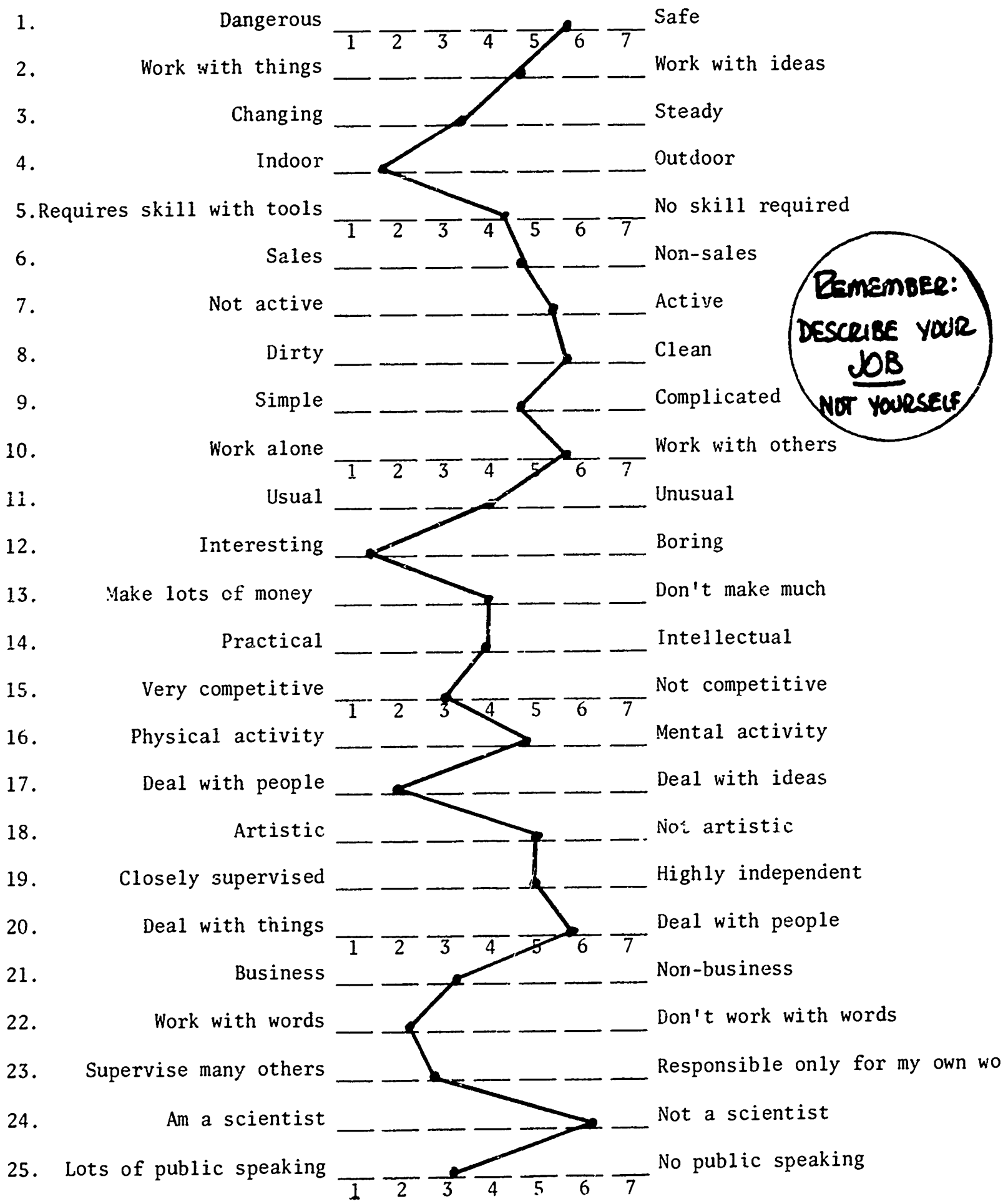


Figure 49

Job Description Checklist

Army Enlisted Personnel (WACs) (N=218)



Chapter 22

Navy Enlisted Personnel

There is substantial similarity between the careers of enlisted Army and Navy personnel. Although the typical inter-service rivalry exists, and each service likes to emphasize the differences, these two groups were still more similar than any other possible pair among the other occupations studied here.

The range of activities open to enlisted women in the Navy is as broad as in the Army, and the types of activities are quite similar. Again, all varieties of work in communications, supply, air traffic control, photography, etc. are handled by the WAVES and, again, as they move up through the ranks, the amount of responsibility they have for the work of others increases.

Method

The sampling of the Navy women differed slightly from that used for the Army sample. As the potential pool of high-ranking non-coms was smaller, and as the Navy preferred to do the mailing directly, two changes were instituted; first, all women on their second enlistment were used, no matter what their rank; second, the mailing went through the Navy chain of command. Each WAVE received her SVIB and questionnaire through her organization, then mailed it back directly to us. Even though this did not permit the use of a follow-up postcard, the percent of return (252 out of 450; 56 percent) was essentially equal to the other groups; probably some informal follow-up was done by those distributing the forms.

Demographic Data

The demographic data for the WAVES is presented in Table 59. The average age of the sample was 32, ten years younger than the WACs; the average experience was 10 years, four years less than the Army sample. Both of these comparisons show the effect of the different method of sampling.

All of the Navy women were high school graduates, one percent had made it through college. Again, the majority were single, though about one-quarter were currently married, or had been. The distribution of rank is also shown in Table 59 , and is somewhat lower than the WAC sample.

Results

The mean scores of the Navy enlisted women on the SVIB Occupational Scales are given in Figure 50They had high scores on their own scale, and on the Army Enlisted scale. Their scores on the Army and Navy Officer scales were moderately high; other moderately high scores were the Physical Education Teacher, Physical Therapist, and Radiologic Technologist scales.

On the SVIB Basic Interest Scales, they had no high scores, indicating no common clustering of interests in any of the areas covered by these scales. Their highest score was on the Sports scale, which explains some of the occupational scores mentioned in the preceding paragraph.

These women had a fair number of means on the Basic Scales which fell below 50, indicating less interest in many of these areas than found among Women-in-General; perhaps the lack of concentration in any single area, and low scores in many others was a factor in these women choosing an occupation that provides many types of opportunities and doesn't really require a strong commitment to any traditional occupational pattern.

Conclusions

The Navy enlisted women had no dominant pattern of interests as reflected by the SVIB Basic Scales; yet an empirical scale based on item-by-item comparison between them and Women-in-General does contain enough items to separate the two groups. Though they were ten years younger, and selected in a slightly different manner than the Army enlisted sample, their interests were most similar to this group.

Though there are a variety of reasons that people shy away from the military life, a career there does have some appeal for those women who are seeking a different type of life--one without the usual stability of home and family, but one with diverse opportunities for different types of work, for travel, and for direct service to one's country.

Table 59

Demographic Data for the Navy Enlisted Personnel

	Mean	SD	Range
Age (years)	32	8.0	21-55
Education (years)	12	.9	8-16
Experience (years)	10	5.8	3-24

Marital Status (in percent)

Single	78
Married	13
Widowed	1
Divorced	9

Geographic Location (in percent)

New England	4
East	23
South	18
Southwest	6
Midwest	18
Northwest	7
California	24

Rank (in percent)

Master Chief Petty Officer	1
Senior Chief Petty Officer	3
Chief Petty Officer	14
Petty Officer 1st Class	28
Petty Officer 2nd Class	36
Petty Officer 3rd Class	18
Seaman	1

Figure 50

OCCUPATIONAL SCALES--Strong Vocational Interest Blank for Women

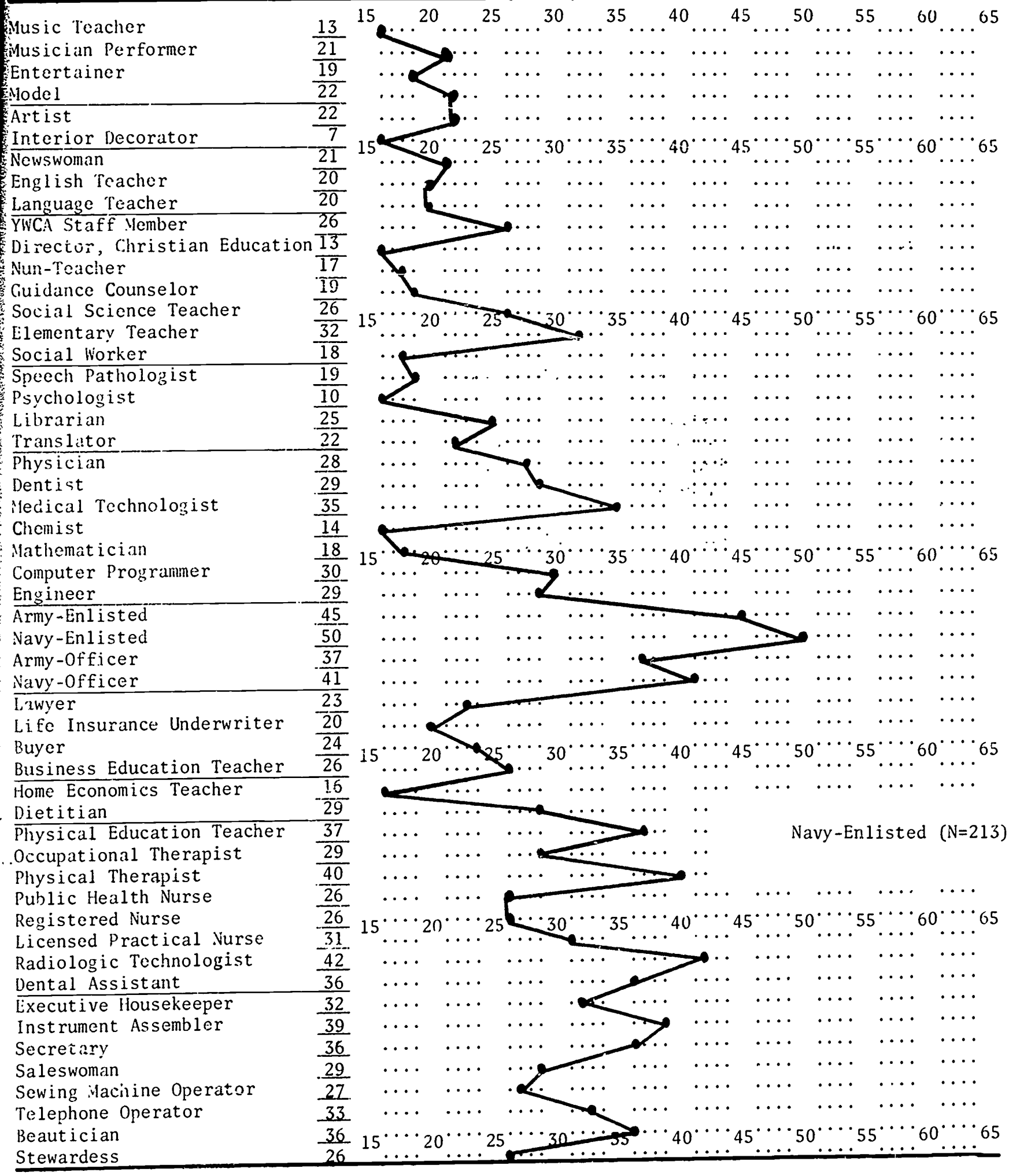


Figure 51

NAME _____ DATE _____ ID NUMBER _____

PROFILE--BASIC SCALES FROM THE SVIB--WOMEN

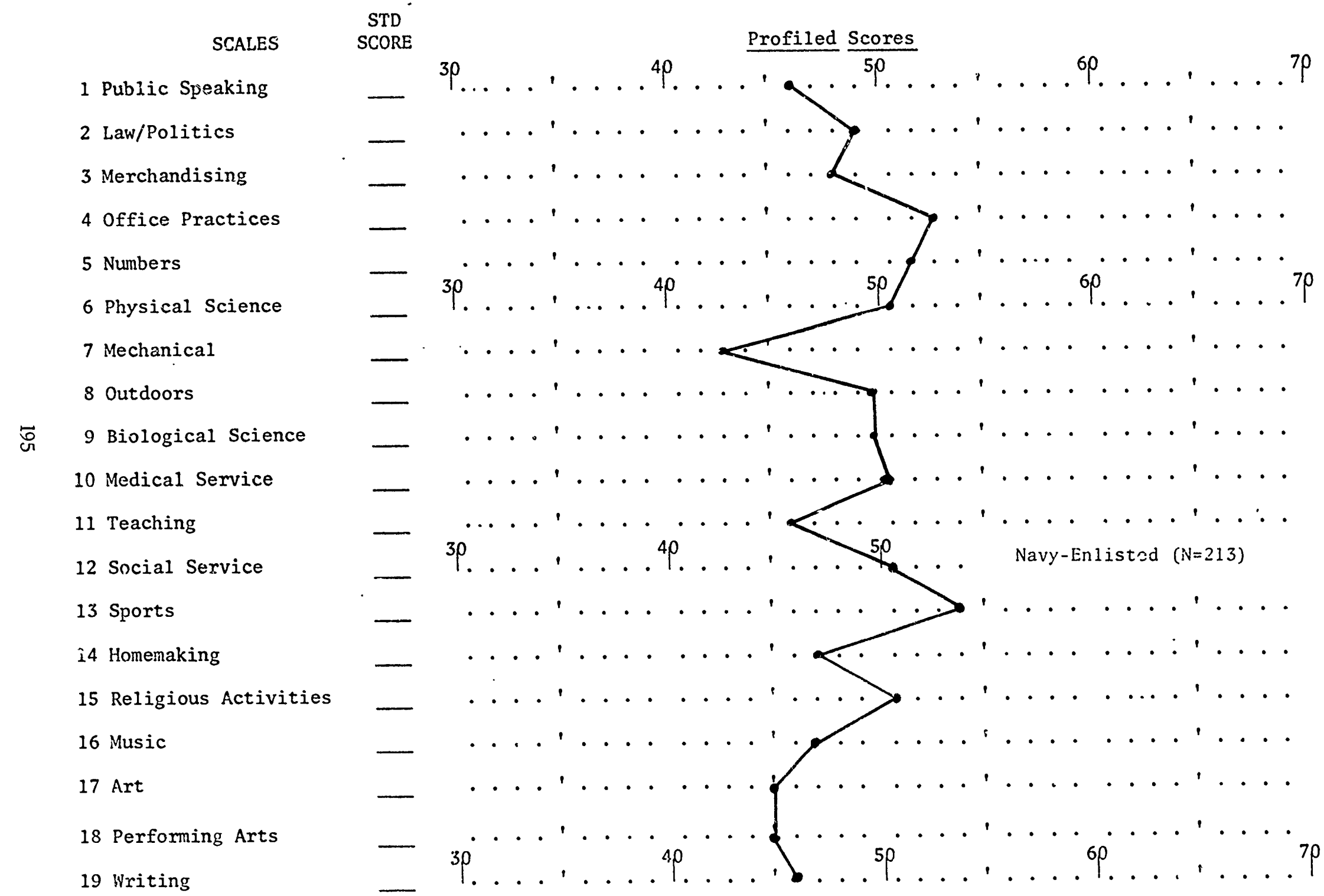
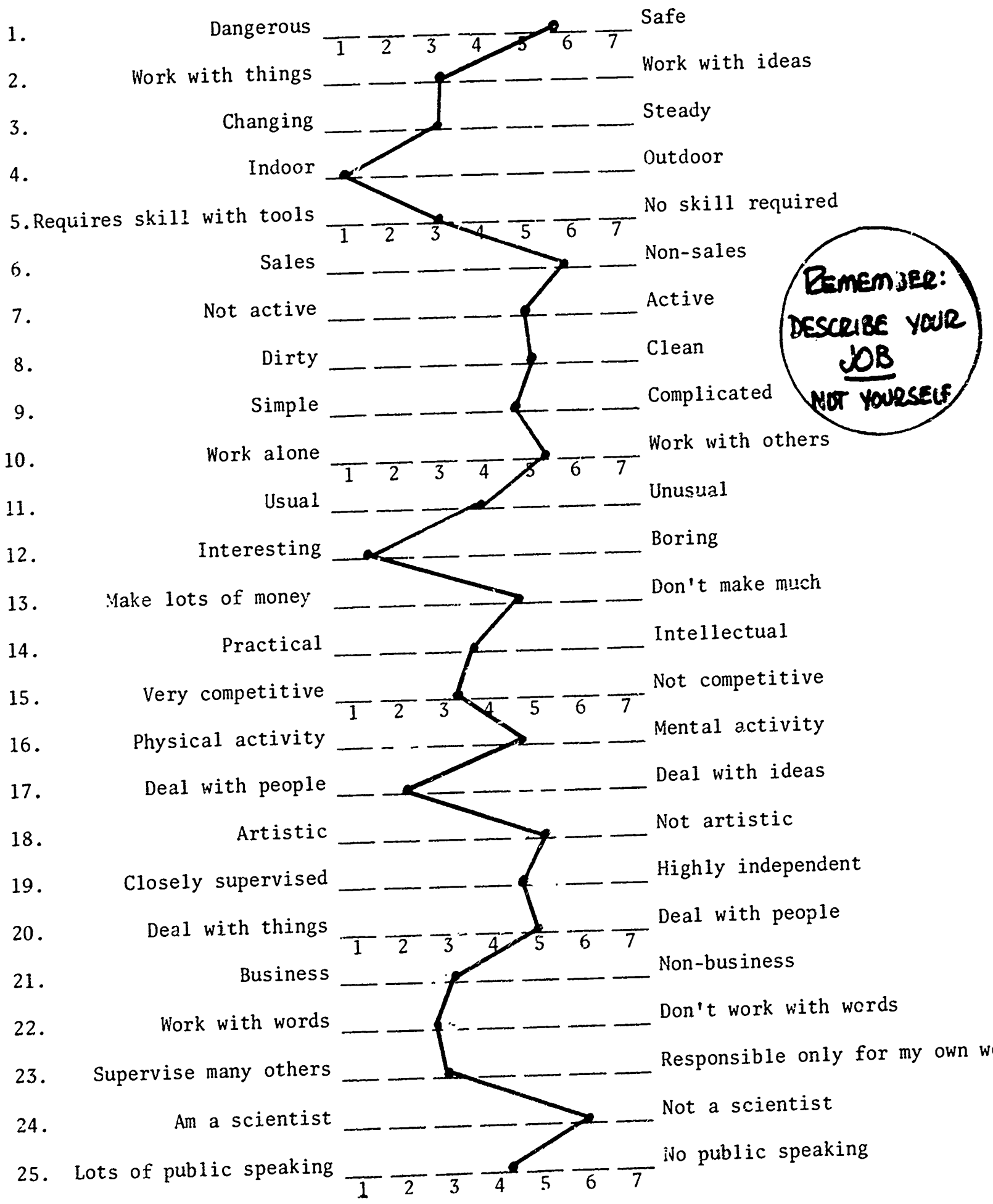


Figure 52

Job Description Checklist

Navy Enlisted Personnel (WAVES) (N=213)



Part III

Conclusions and Recommendations

Chapter 23

Summary, Conclusions, and Recommendations

The main purpose of this study was to study the vocational interests of women in several nonprofessional occupations, particularly to determine if there are large and meaningful differences between occupations. There is a widely held belief that women are more likely to choose between jobs at this level on the basis of economic and convenience factors rather than selecting the job on the basis of the activities involved. The research reported here suggests that the latter is instead the case--women do sort themselves into different occupations, even at the nonprofessional level, according to their preferences for specific vocational activities. The most important end-product of this project was a set of interest inventory scales which should help counselors advise women on these facotrs.

The subsidiary goals here were to study various ways of building vocational interest scales, to study how these women described their jobs, and to actually collect demographic data from the women in a variety of nonprofessional occupations.

Seventeen occupations were studied in this project; with one or two exceptions, they were those that could be entered by women with no, or relatively little, post-high school training. The specific occupations represented various areas in the occupational world--medical, business, clerical, artistic, production, and so forth.

Those included were:

Beauticians
Dental Assistants
Elementary Teachers
Entertainers
Executive Housekeepers
Interior Decorators
Instrument Assemblers
Licensed Practical Nurses
Life Insurance Underwriters
Radiologic Technologists
Saleswomen
Secretaries
Sewing Machine Operators
Stewardesses
Telephone Operators
Army Enlisted Personnel
Navy Enlisted Personnel

Within each occupation, the target population was "satisfied, successful employed women." The sampling technique was to find women who had at least three years of experience, who said they enjoyed their work, and who had passed some hurdle of performance such as certification or licensing. These criteria were not always met but, in general, the sampling bias was in their direction. Because we were studying real people employed in the real world, the actual samples represented some compromises between what was theoretically desirable and what was practically possible.

The samples were usually drawn from rosters furnished by the relevant national organization. Each woman was mailed a copy of the Strong Vocational Interest Blank and a short questionnaire. Included in the latter form was a Job Description Checklist, which asked the person to describe her work on 25 "semantic-differential" type adjective pairs. About 500 forms were mailed to each occupation, when that many names and addresses were available. Roughly, 11,000 forms were mailed out, and 50 percent of them were returned. Of these, 77 percent met the necessary criteria for inclusion here. Overall, the respondents averaged 41 years old, and had 13 years of experience in their occupation. The majority were married (62 percent, excluding those occupations where marriage was restricted), but this indicates that over 40 percent of them were living alone. Most of them had high school diplomas, many of them had some post-high school education relevant to their occupation. Their geographic distribution varied according to how the sample was drawn.

All of the women included here reported that they enjoyed their work, that should be emphasized as some of these occupations might, on the surface, appear to be deadly boring. While the percentage of dissatisfied respondents varied from sample to sample and all jobs are not equally appealing, for all of the occupations studied here, some women, usually a few hundred, were located who said they enjoyed it. Job satisfaction is not reserved solely for the professionals.

Classifying these women together into a single cluster--"nonprofessional women"--and suggesting that they have much in common is very misleading. The women included here varied from a sewing machine operator with a fourth grade education, working in a garment factory in the Deep South, to an outstanding interior decorator working on Park Avenue with the nation's rich, making a commensurate income. In age and temperament, the stewardesses contrasted sharply with the licensed practical nurses--in personality and life style, the outdoing life insurance underwriters had little in common with the factory-oriented instrument assemblers. About the only common factor was that it is possible to enter these occupations without a college education. (The elementary teachers were an exception; their inclusion here is explained in Chapter). Aside from that, a satisfying amount of diversity exists in this portion of the occupational spectrum, and all manner of women can find activities that interest them, albeit at modest pay levels.

The picture which emerged for each group was, for the most part, characterized by their unique qualities, and was similar to the usual stereotype of the occupation, though there ere a few surprises. These data do provide a firmer foundation for clinical intuition, and the newly developed SVIB scales for each occupation will permit a more systematic understanding, and a more rational approach to counseling women seeking work at this level.

The responses of each occupation to the SVIB were used to construct empirical scales; for each occupation, the scale contained the items that those women endorsed substantially more often than Women-in-General. All of these scales successfully separated the groups from Women-in General and from each other though, of course, some were better than others. In general, however, one can conclude that there were differences between these occupational groups in their measured interests, and this suggests that women at this level do sort themselves into their occupations on the basis of some sort of preferences.

Thus, the main conclusion is that vocational interest inventory scales for these occupations should be useful in advising women looking for occupational possibilities.

> Recommendation: These scales should be used by agencies working with non-college women. Further, because this information is useful to the individual who is trying to find an occupational niche, the scales should be made widely available, and their use should not be restricted to one-to-one counseling settings.
>
> With the cooperation of the SVIB publisher, these scales will be added to the SVIB profile next year and will be available for general use.

In a subsidiary study in this project, two groups of Women-in-General were used here to build the empirical scales, and considerable work was done to determine which was better for this purpose. The first group included women from the entire range of the occupational spectrum--from the highest level professional occupations to the lowest level semi-skilled trades; the second included only those from the non-professional occupations.

In the various comparisons made between the two methods, neither of them was always superior. For some comparisons, one approach was better, but for the others, the reverse was true. When all factors were considered, the scales based on the total Women-in-General sample seemed preferable, and those are the scales recommended here for general use.

There were other subsidiary studies, but they were less important and have been reported adequately in the text.

Although we gathered relevant data on the main topics under study here, and some relevant conclusions were established, there were, of course, many unanswered questions; some of them are:

> 1. Intra-Occupational differences: The techniques used here minimized the differences between members of the same occupation, yet the people in any occupation always emphasize the diversity

among their membership, and are more interested in discussing the differences between their various subsets than in searching for differences between them and other occupations.

2. The development of different patterns of interests: This has been a cross-sectional study, with no data generated as to how the occupational differences appear initially. How are these different dispositions toward occupations formed? At the moment, nothing much is known about this.

3. The structure of vocational interests: How to conceptualize the relationships between occupations is still a puzzle, and this is the heart of the Women-in-General problem. If there were some available logic for assigning occupations to "professional" or "nonprofessional" or some other groupings, then scale building could be done within these groupings. At the moment, no satisfactory solution exists.

These problems are general and not restricted to the area of nonprofessional women. Perhaps this report should conclude with a comment directed mainly to their needs.

The women in this portion of the occupational world are among the most understudied of all employed persons. Because they are not members of the professions, there are almost no research activities carried on in regard to their selection and retention. Because they are women, they are relatively docile and seldom create the direct confrontations which usually lead to studies, which lead to new programs. This lack of attention paid to them in research studies is just a symptom of their lack of prominence in other respects, and of their lack of power.

There is no female analogy of the Teamster's Union; there are no equivalent craft unions fighting for the high hourly wages of the male skilled craftsmen; working women do not have a Walter Reuther agitating for a guaranteed annual wage--they do not even have an Eric Hoffer to bring them dignity. There is little to suggest that this will change in the future, and one would have to predict that these women will fall further behind. Until they adopt a more fashionable militancy, their pay and prestige will not increase. If their situation becomes grim enough, and they do decide to act, there is little doubt that they could succeed. The nation's secretaries could close this country down overnight, if they chose.

The 1930's belonged to the male labor unions, the 40's to the war, the 50's to industrial prosperity, the 60's to the Negro--perhaps one of the future decades will be dominated by the women from this segment of the working world. Possibly, by paying some attention to these women now, that future turmoil might be avoided.

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Part IV

Appendices

Appendix A

STRONG VOCATIONAL INTEREST BLANK FOR WOMEN: FORM TW400-R

and Questionnaire

CUPATION ..... CODE NUMBER ..... Form TW400-R

[1966 RESEARCH EDITION]

STRONG VOCATIONAL INTEREST BLANK FOR WOMEN

By EDWARD K. STRONG, JR.

Revised by

David P. Campbell
University of Minnesota

It is possible with a fair degree of accuracy to determine by this inventory whether or not you would like certain occupations. This is not a test of intelligence or special abilities. It does measure the extent to which your interests agree or disagree with those of successful women in a given occupation.

Date.....
Month Day Year

1. Name ..... 2. Age..... 3. Sex.....
LAST FIRST MIDDLE
4. Address .....
.....
5. Last grade finished in school (e.g., Elementary 6th, High School 2nd. College 4th) .....
6. Highest degree earned .....
7. Employer .....
8. Occupation (e.g., Nurse) .....
9. Years of experience in it .....
0. Just what do you do? .....
1. Do you like your work? Very much..... So-so..... Dislike it.....
2. Do you think you would like your work better if you were employed by another company? Yes..... No .....

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Stanford, California

Part I. Occupations. For each occupation listed below, indicate whether you would like that kind of work or not. Don't worry about whether you would be good at the job, or about your lack of training for it. Forget about how much money you could make, or whether you could get ahead in it. Think only about whether you would like the work that is done in that job.

Draw a circle around L if you **like** that kind of work.

Draw a circle around I if you are **indifferent** to that kind of work.

Draw a circle around D if you **dislike** that kind of work.

Work fast. Put down the first thing that comes to mind. Answer every item.

1 Actress	L	I	D	46 Hostess	L	I	D
2 Dental Assistant	L	I	D	47 Hotel Manager	L	I	D
3 Income Tax Accountant	L	I	D	48 Housekeeper	L	I	D
4 Advertiser	L	I	D	49 Illustrator	L	I	D
5 Architect	L	I	D	50 Interior Decorator	L	I	D
6 Artist	L	I	D	51 Interpreter	L	I	D
7 Artist's Model	L	I	D	52 Inventor	L	I	D
8 Athletic Director	L	I	D	53 Judge	L	I	D
9 Author of children's books	L	I	D	54 Laboratory Technician	L	I	D
10 Author of novel	L	I	D	55 Landscape Gardener	L	I	D
11 Author of technical book	L	I	D	56 Lawyer, Corporation	L	I	D
12 Airplane Pilot	L	I	D	57 Lawyer, Criminal	L	I	D
13 Bacteriologist	L	I	D	58 Librarian	L	I	D
14 Bank Teller	L	I	D	59 Life Insurance Saleswoman	L	I	D
15 Beauty Specialist	L	I	D	60 Magazine Writer	L	I	D
16 Biologist	L	I	D	61 Manager, Women's Style Shop	L	I	D
17 Bookkeeper	L	I	D	62 Fashion Model	L	I	D
18 Buyer of merchandise	L	I	D	63 Professional Golfer	L	I	D
19 Cartoonist	L	I	D	64 Mechanical Engineer	L	I	D
20 Cashier in bank	L	I	D	65 Church Worker	L	I	D
21 Caterer	L	I	D	66 Courtroom Stenographer	L	I	D
22 Chemist	L	I	D	67 Missionary	L	I	D
23 City or State Employee	L	I	D	68 Art Museum Director	L	I	D
24 College Professor	L	I	D	69 Music Composer	L	I	D
25 Computer Operator	L	I	D	70 Musician	L	I	D
26 Children's Clothes Designer	L	I	D	71 News Photographer	L	I	D
27 Cook	L	I	D	72 Nurse	L	I	D
28 Costume Designer	L	I	D	73 Policewoman	L	I	D
29 Dean of Women	L	I	D	74 Office Clerk	L	I	D
30 Dentist	L	I	D	75 Office Manager	L	I	D
31 Dietitian	L	I	D	76 Opera Singer	L	I	D
32 Draftsman	L	I	D	77 Pharmacist	L	I	D
33 Dramatist	L	I	D	78 Physician	L	I	D
34 Dressmaker	L	I	D	79 Playground Director	L	I	D
35 Editor	L	I	D	80 Poet	L	I	D
36 Educational Director	L	I	D	81 Politician	L	I	D
37 Employment Manager	L	I	D	82 Portrait Photographer	L	I	D
38 Electronics Technician	L	I	D	83 Private Secretary	L	I	D
39 Manager of children's nursery at resort hotel	L	I	D	84 Probation Officer	L	I	D
40 Farmer	L	I	D	85 Nurse's Aid	L	I	D
41 Florist	L	I	D	86 Professional Dancer	L	I	D
42 Foreign Correspondent	L	I	D	87 Psychiatrist	L	I	D
43 Supermarket Checkout Clerk	L	I	D	88 Psychologist	L	I	D
44 Hospital Records Clerk	L	I	D	89 Railroad Reservations Clerk	L	I	D
45 Governor of a State	L	I	D	90 Veterinarian for small animals	L	I	D

91 Radio Announcer	L	I	D
92 Radio Program Director	L	I	D
93 Radio-TV Singer	L	I	D
94 Real Estate Saleswoman	L	I	D
95 Receptionist	L	I	D
96 Reporter, General	L	I	D
97 Reporter, Women's Page	L	I	D
98 Retailer	L	I	D
99 Sales Manager of large bookstore	L	I	D
100 Scenario Writer	L	I	D
101 Scientific Illustrator	L	I	D
102 Scientific Research Worker	L	I	D
103 Sculptress	L	I	D
104 School Principal	L	I	D
105 Secret Service Woman	L	I	D
106 Social Worker	L	I	D
107 Specialty Saleswoman	L	I	D
108 Statistician	L	I	D
109 Stenographer	L	I	D
110 Stewardess	L	I	D
111 Surgeon	L	I	D
112 Teacher, Art	L	I	D
113 Teacher, Commercial	L	I	D
114 Teacher, Dancing	L	I	D
115 Teacher, Domestic Science	L	I	D
116 Teacher, Grade School	L	I	D
117 Teacher, High School	L	I	D
118 Teacher, Kindergarten	L	I	D
119 Teacher, Music	L	I	D
120 Tea Room Proprietress	L	I	D
121 Supervisor in telephone office	L	I	D
122 Travel Bureau Manager	L	I	D
123 Typist	L	I	D
124 Vocational Counselor	L	I	D
125 Waitress	L	I	D
126 Weather Forecaster	L	I	D
127 X-Ray Technician	L	I	D
128 Y.W.C.A. Secretary	L	I	D

Part II. Amusements. Show in the same way as you did before whether or not you like these ways of having fun. Work rapidly. Do not think over various possibilities. Record your first feeling of liking, indifference, or disliking.

129 Chess	L	I	D
130 Jazz concerts	L	I	D
131 Sketching pictures of wild animals	L	I	D
132 Camping out	L	I	D
133 Golf	L	I	D
134 Horseback riding	L	I	D
135 Looking at things in hardware store	L	I	D
136 Bridge	L	I	D
137 Planning a large party	L	I	D
138 Afternoon teas	L	I	D
139 Bird watching	L	I	D
140 Solving mechanical puzzles	L	I	D
141 Playing the piano	L	I	D
142 Amusement parks	L	I	D
143 Hiking	L	I	D
144 Conventions	L	I	D
145 Formal dress affairs	L	I	D
146 Telling jokes	L	I	D
147 Travel magazines	L	I	D
148 Art galleries	L	I	D
149 Religious music	L	I	D
150 Attending lectures	L	I	D
151 Popular mechanics magazines	L	I	D
152 Symphony concerts	L	I	D
153 Reading the Bible	L	I	D
154 Movies	L	I	D
155 Financial pages in newspapers	L	I	D
156 Women's pages	L	I	D
157 Poetry	L	I	D
158 Collecting antique furniture	L	I	D
159 Performing scientific experiments	L	I	D
160 Electioneering for office	L	I	D
161 Educational movies or TV	L	I	D
162 Magazines about art and music	L	I	D
163 Making a radio or hi-fi set	L	I	D
164 Leading a Girl Scout troop	L	I	D
165 Writing a one-act play	L	I	D
166 Science fiction magazines	L	I	D
167 Business methods magazines	L	I	D
168 Night clubs	L	I	D
169 Church young people's group	L	I	D
170 Biographies	L	I	D

Part III. Activities. Indicate your interests as before.

171 Being the first to wear the very latest fashions	L	I	D
172 Being head of a civic improvement program	L	I	D
173 Expressing judgments publicly, regardless of what others say	L	I	D
174 Giving "first aid" assistance	L	I	D
175 Raising flowers and vegetables	L	I	D
176 Operating machinery	L	I	D
177 Repairing electrical wiring	L	I	D
178 Doing your own laundry work	L	I	D
179 Decorating a room with flowers	L	I	D
180 Arguments	L	I	D
181 Interviewing men for a job	L	I	D
182 Interviewing clients	L	I	D
183 Going to church	L	I	D
184 Making a speech	L	I	D
185 Cooking	L	I	D
186 Sewing	L	I	D
187 Organizing a play	L	I	D
188 Starting a conversation with a stranger	L	I	D
189 Preparing dinner for guests	L	I	D
190 Teaching children	L	I	D
191 Teaching adults	L	I	D
192 Operating office machines	L	I	D
193 Discussions of politics	L	I	D
194 Reading editorial columns	L	I	D
195 Meeting and directing people	L	I	D
196 Taking responsibility	L	I	D
197 Taping a bruised ankle	L	I	D
198 Adjusting difficulties of others	L	I	D
199 Doing research work	L	I	D
200 Acting as cheer-leader	L	I	D
201 Writing reports	L	I	D
202 Entertaining others	L	I	D
203 Watching an open-heart operation	L	I	D
204 Checking typewritten material for errors	L	I	D
205 Trying new cooking recipes	L	I	D
206 Organizing cupboards and closets	L	I	D
207 Displaying merchandise in a store	L	I	D
208 Being left to yourself	L	I	D
209 Regular hours for work	L	I	D
210 Continually changing activities	L	I	D
211 Saving money	L	I	D
212 Contributing to charities	L	I	D
213 Raising money for a charity	L	I	D
214 Looking at a collection of rare laces	L	I	D
215 Making statistical charts	L	I	D

Part IV. Types of People. People tend to choose jobs where they can work with individuals they enjoy. Please indicate here your feelings about having day-to-day contact with the following types of people. Work fast- don't think of specific examples- -give the first impression that comes to mind.

216 Highway construction workers	L	I	D
217 High school students	L	I	D
218 College Professors	L	I	D
219 Jet Pilots	L	I	D
220 Male Hairdressers	L	I	D
221 Corporation Executives	L	I	D
222 Girls who enter beauty contests	L	I	D
223 People who are natural leaders	L	I	D
224 Long-haul truck drivers	L	I	D
225 Emotional people	L	I	D
226 Thrifty people	L	I	D
227 Religious people	L	I	D
228 Housewives	L	I	D
229 Nonconformists	L	I	D
230 Famous chefs	L	I	D
231 Artistic men	L	I	D
232 Foreigners	L	I	D
233 Public opinion interviewers	L	I	D
234 Men who live dangerously	L	I	D
235 Physically sick people	L	I	D
236 Musical geniuses	L	I	D
237 People who daydream a lot	L	I	D
238 Outspoken people with new ideas	L	I	D
239 Racing car drivers	L	I	D
240 Outstanding scientists	L	I	D
241 Fashionably dressed people	L	I	D
242 Carelessly dressed people	L	I	D
243 Ballet dancers	L	I	D
244 Socialists	L	I	D
245 People who like to gamble	L	I	D
246 Athletic men	L	I	D
247 Babies	L	I	D
248 Very old people	L	I	D
249 Men who perform on TV	L	I	D
250 People who insist on having everything in its proper place	L	I	D
251 Prominent labor union men	L	I	D
252 Military men	L	I	D
253 Women athletes	L	I	D
254 People who don't believe in evolution	L	I	D
255 People who have made fortunes in business	L	I	D

Be sure to read instructions for Part V on next page.

Part V. Order of Preference of Activities. Here are ten things you could do. First, read all ten. Then select the *THREE* things you would like *best* to do. Mark an **X** opposite these in the first column. Then select the *THREE* things you would like *least* to do and mark these in the second column.

	Mark Three Most Liked Here	Mark Three Least Liked Here	
256	( )	( )	Design a new home
257	( )	( )	Have responsibility for care of new home
258	( )	( )	Discover an improvement in the design of the house
259	( )	( )	Determine the cost of building and furnishing the house
260	( )	( )	Supervise the furnishing of the house
261	( )	( )	Plan the landscaping
262	( )	( )	Sell "ideal" houses
263	( )	( )	Prepare the advertising for new houses to be offered for sale
264	( )	( )	Teach others how to furnish their homes
265	( )	( )	Interest the public in building their own homes through public addresses

Show in the same way the *THREE* things that mean the *most* to you in a job: then the *THREE least* important things.

	Three Most Important	Three Least Important	
266	( )	( )	Salary received for work
267	( )	( )	Steadiness and permanence of work
268	( )	( )	Opportunity for promotion
269	( )	( )	Courteous treatment from superiors
270	( )	( )	Opportunity to make use of all of one's knowledge and experience
271	( )	( )	Opportunity to ask questions and to consult about difficulties
272	( )	( )	Opportunity to understand just how one's superior expects work to be done
273	( )	( )	Certainty one's work will be judged by fair standards
274	( )	( )	Freedom in working out one's own methods of doing the work
275	( )	( )	Co-workers—congenial, competent, and adequate in number

Show in the same way the *THREE* occupations you would *most* like: also the *THREE* you would *least* like.

	Three Most Liked	Three Least Liked	
276	( )	( )	President, Women's College
277	( )	( )	Author of best-selling novel
278	( )	( )	Outstanding opera singer
279	( )	( )	Owner-manager of chain of women's shops
280	( )	( )	World-renowned scientist
281	( )	( )	Tennis champion
282	( )	( )	Wife of U.S. President
283	( )	( )	Famous actress
284	( )	( )	Prominent artist
285	( )	( )	Supreme Court Justice

Show in the same way the *THREE* offices you would like *most* to hold in a club or society: also mark the *THREE* you would *least* like to hold.

	Three Most Liked	Three Least Liked	
286	( )	( )	President of a Society
287	( )	( )	Secretary of a Society
288	( )	( )	Treasurer of a Society
289	( )	( )	Member of a Society
290	( )	( )	Chairman, Arrangement Committee
291	( )	( )	Chairman, Educational Committee
292	( )	( )	Chairman, Entertainment Committee
293	( )	( )	Chairman, Membership Committee
294	( )	( )	Chairman, Program Committee
295	( )	( )	Chairman, Publicity Committee

Please check to see that you have three check marks in both columns for each set of 10 questions.

Part VI. Preference between Two Items. Show here which of two different kinds of work or ways of doing things you like better. If you prefer the items on the left, mark an **X** in the first column; if you prefe the items on the right, mark in the third column. If you like both the same or if you can't decide which one you like better, mark in the middle column. Work rapidly.

		(1)	(2)	(3)	
296	Physical education director	( )	( )	( )	Magazine writer
297	Statistician	( )	( )	( )	Social worker
298	Airplane pilot	( )	( )	( )	Stenographer
299	Teacher	( )	( )	( )	Saleswoman
300	House-to-house canvassing	( )	( )	( )	Retail selling
301	Take dancing lessons	( )	( )	( )	Take singing lessons
302	Develop plans	( )	( )	( )	Execute plans
303	Do a job yourself	( )	( )	( )	Tell somebody to do job
304	Talk others into doing something	( )	( )	( )	Order others to do something
305	Keep books on household finances	( )	( )	( )	Recover furniture
306	Deal with things	( )	( )	( )	Deal with people
307	Fashion magazines	( )	( )	( )	Household magazines
308	Activity which produces tangible returns	( )	( )	( )	Activity which is enjoyed for its own sake
309	Preparing a meal	( )	( )	( )	Making a dress
310	Taking a chance	( )	( )	( )	Playing safe
311	Work for yourself	( )	( )	( )	Carry out program of superior who is respected
312	Experiment with new beauty preparations	( )	( )	( )	Experiment with new office equipment
313	Follow own career after marriage	( )	( )	( )	Follow home and social activities after marriage
314	Work with few details	( )	( )	( )	Work with many details
315	Be married with small income	( )	( )	( )	Be single and earn your own living
316	Working for men	( )	( )	( )	Working for women
317	Work in which you move from place to place	( )	( )	( )	Work where you stay in one place
318	Great variety of work	( )	( )	( )	Similarity in work
319	Physical activity	( )	( )	( )	Mental activity
320	Be married to a research scientist	( )	( )	( )	Be married to a sales executive
321	Travel alone and make own preparations	( )	( )	( )	Travel with someone who makes all the decisions
322	Present a report in writing	( )	( )	( )	Present a report verbally
323	Listening to a story	( )	( )	( )	Telling a story
324	Do your own housework	( )	( )	( )	Have someone else do your housework
325	Amusement where there is a crowd	( )	( )	( )	Amusement alone or with one or two others
326	Work in an import-export business	( )	( )	( )	Work in a research laboratory
327	Spend a great deal of time on make-up before going out	( )	( )	( )	Go out without make-up
328	Be married to a rancher	( )	( )	( )	Be married to a corporation president
329	Reading a book	( )	( )	( )	Watching TV or going to a movie
330	Going to a play	( )	( )	( )	Going to a dance
331	Thrilling, dangerous activities	( )	( )	( )	Quieter, safer activities
332	Display merchandise in store window	( )	( )	( )	Arrange table settings for large banquet
333	A few close friends	( )	( )	( )	Many acquaintances

Part VII. Your Abilities and Characteristics. Show here what kind of person you are and the kinds of things you do. If the item really describes you, mark in the first column (**Yes**); if the item does **not** describe you, mark in the third column (**No**); if you are not sure, mark in the second column (**?**). (Be frank in pointing out your weak points because these are as important as your strong points in choosing a career.)

	YES	(?)	NO
334 Usually start activities of my group	( )	( )	( )
335 Have more than my share of novel ideas	( )	( )	( )
336 Win friends easily	( )	( )	( )
337 Usually get other people to do what I want done	( )	( )	( )
338 Keep detailed records of expenses	( )	( )	( )
339 Usually liven up the group on a dull day	( )	( )	( )
340 Have mechanical ingenuity (inventiveness)	( )	( )	( )
341 Prefer working alone to working on committees	( )	( )	( )
342 Do my best work early in the morning	( )	( )	( )
343 Can prepare successful advertisements	( )	( )	( )
344 Am always on time with my work	( )	( )	( )
345 Remember faces, names, and incidents better than the average person	( )	( )	( )
346 Can correct others without giving offense	( )	( )	( )
347 Able to meet emergencies quickly and effectively	( )	( )	( )
348 My grades in high school were a fairly accurate reflection of my abilities	( )	( )	( )
349 Can write a concise, well-organized report	( )	( )	( )
350 Have good judgment in appraising values	( )	( )	( )
351 Plan my work in detail	( )	( )	( )
352 Stimulate the ambition of my associates	( )	( )	( )
353 Enjoy tinkering with small hand tools	( )	( )	( )
354 Can smooth out tangles and disagreements between people	( )	( )	( )
355 Discuss my ideals with others	( )	( )	( )

Mark the column which best describes you.

356 Worry about mistakes	A good deal ( )	Very little ( )	Never ( )
357 Complaints annoy me	Rarely ( )	Sometimes ( )	Quite a bit ( )
358 Lend money to	Acquaintances ( )	Only certain people ( )	Hardly anyone ( )
359 In my family, I am the	Oldest (or only child) ( )	Youngest ( )	Neither youngest nor oldest ( )
360 At a large conference, I prefer a seat	In first 3 rows ( )	Half-way back ( )	In rear of room ( )
361 Make bets	Often ( )	Sometimes ( )	Rarely ( )

Part VIII. School Subjects. Show as before your interest in these school subjects. even though you may not have studied them.

362 Algebra	L	I	D
363 Arithmetic	L	I	D
364 Art	L	I	D
365 Bible History	L	I	D
366 Bookkeeping	L	I	D
367 Botany	L	I	D
368 Calculus	L	I	D
369 Chemistry	L	I	D
370 Civics (government)	L	I	D
371 Home Economics	L	I	D
372 Dramatics	L	I	D
373 Education (teacher training)	L	I	D
374 Economics	L	I	D
375 English Composition	L	I	D
376 Geography	L	I	D
377 Geology	L	I	D
378 Geometry	L	I	D
379 History	L	I	D
380 Journalism	L	I	D
381 Languages, Ancient	L	I	D
382 Languages, Modern	L	I	D
383 Literature	L	I	D
384 Mechanical Drawing	L	I	D
385 Woodworking	L	I	D
386 Nature Study	L	I	D
387 Penmanship	L	I	D
388 Philosophy	L	I	D
389 Physical Education	L	I	D
390 Physics	L	I	D
391 Physiology	L	I	D
392 Political Science	L	I	D
393 Psychology	L	I	D
394 Public Speaking	L	I	D
395 Shorthand	L	I	D
396 Sociology	L	I	D
397 Spelling	L	I	D
398 Statistics	L	I	D
399 Typewriting	L	I	D
400 Zoology	L	I	D

UNIVERSITY OF MINNESOTA RESEARCH QUESTIONNAIRE
Please fill in all blanks as completely as possible.

NAME _____ Date _____

Marital Status (please circle) Single Married Widowed Divorced

Number of children _____

I entered my occupation because : (Please check all reasons that apply to you)

_____ Someone influenced me to try it. Who? Circle one: (parents, teachers, counselor, someone in the occupation, other.)

_____ My training prepared me for it.

_____ It was the best paid job available when I needed a job.

_____ I need the income, otherwise I would not work.

_____ I enjoy the work.

_____ The hours and location of my job fit in with my home life.

_____ There are good opportunities for advancement in this field.

_____ I like the people with whom I come in contact.

_____ Other _____

My Long Range Plans for Employment are: (Please check all reasons that apply to you)

_____ To work only until marriage.

_____ To work only until I have a baby.

_____ To work only until I have two children.

_____ To work most of my life at my present occupation even though I marry and have children.

_____ To work all my life and remain single.

_____ To work only when financial conditions make it necessary.

_____ To work until marriage or pregnancy and return to my present occupation in about _____years.

_____ To work until marriage or pregnancy and return to a different occupation in about _____years. What occupation? _____

_____ To get additional training in _____

_____ Other _____

Below is another way to describe your job. There are several pairs of words or phrases, separated by a line. Please place a mark along the line to indicate where you think your job falls on that line.

Example: If your job is almost entirely outdoors, you would place the check mark here.

Indoor	___	___	___	___	___	X	___	Outdoor
	1	2	3	4	5	6	7	

Now please do the same with the following words. Make one check mark for each pair.

1. Dangerous	___	___	___	___	___	___	___	Safe
	1	2	3	4	5	6	7	
2. Work with things	___	___	___	___	___	___	___	Work with ideas
3. Changing	___	___	___	___	___	___	___	Steady
4. Indoor	___	___	___	___	___	___	___	Outdoor
5. Requires skill with tools	___	___	___	___	___	___	___	No skill required
	1	2	3	4	5	6	7	
6. Sales	___	___	___	___	___	___	___	Non-sales
7. Not active	___	___	___	___	___	___	___	Active
8. Dirty	___	___	___	___	___	___	___	Clean
9. Simple	___	___	___	___	___	___	___	Complicated
10. Work alone	___	___	___	___	___	___	___	Work with others
	1	2	3	4	5	6	7	
11. Usual	___	___	___	___	___	___	___	Unusual
12. Interesting	___	___	___	___	___	___	___	Boring
13. Make lots of money	___	___	___	___	___	___	___	Don't make much
14. Practical	___	___	___	___	___	___	___	Intellectual
15. Very competitive	___	___	___	___	___	___	___	Not competitive
	1	2	3	4	5	6	7	
16. Physical activity	___	___	___	___	___	___	___	Mental activity
17. Deal with people	___	___	___	___	___	___	___	Deal with ideas
18. Artistic	___	___	___	___	___	___	___	Not artistic
19. Closely supervised	___	___	___	___	___	___	___	Highly independent
20. Deal with things	___	___	___	___	___	___	___	Deal with people
	1	2	3	4	5	6	7	
21. Business	___	___	___	___	___	___	___	Non-business
22. Work with words	___	___	___	___	___	___	___	Don't work with words
23. Supervise many others	___	___	___	___	___	___	___	Responsible only for my own work
24. Am a scientist	___	___	___	___	___	___	___	Not a scientist
25. Lots of public speaking	___	___	___	___	___	___	___	No public speaking
	1	2	3	4	5	6	7	

REMEMBER: DESCRIBE YOUR JOB NOT YOURSELF

UNIVERSITY OF *Minnesota*

OFFICE OF THE DEAN OF STUDENTS · STUDENT COUNSELING BUREAU
CENTER FOR INTEREST MEASUREMENT RESEARCH
MINNEAPOLIS, MINNESOTA 55455

Dear Telephone Operator:

We are conducting a large-scale study of the interests of telephone operators; we need your help. Could you please fill in the enclosed Strong Vocational Interest Blank and return it in the envelope?

Although our research institute is continually surveying different occupational groups, we are looking forward especially to this project. There must be something unique about a group of women who can convey helpfulness and competence just by the sound of their voices.

Your answers will, of course, be completely confidential, and used only within our offices. Summary information on telephone operators as a group will be made available to high school and college counselors for use in advising young women.

Your own personal results will be sent to you with an explanation of their meaning when the study is completed; most people find it fascinating to look over their score sheet.

To make the study meaningful, we need full participation. Could you sit down very soon and fill in your answers?

Thanks for your help.

Sincerely,

David P Campbell

David P. Campbell
Associate Professor of Psychology
and Director

Lenore W Harmon

Lenore W. Harmon
Assistant Professor

DPC/LWH:avg
Enclosures

UNIVERSITY OF *Minnesota*

OFFICE OF THE DEAN OF STUDENTS • STUDENT COUNSELING BUREAU
CENTER FOR INTEREST MEASUREMENT RESEARCH
MINNEAPOLIS, MINNESOTA 55455

Summer, 1967

Dear Executive Housekeeper:

The University of Minnesota, with the help of the National Executive Housekeepers' Association, is conducting a study of the vocational interests of executive housekeepers. Would you help us by completing the enclosed interest inventory and questionnaire and returning them in the accompanying envelope?

This study is part of a larger project on women's occupations. Many other groups--including chemists, beauticians, physicians, dental assistants, and fashion models--are providing similar information. The results of this research will be made widely available to counselors and others who are helping young women think about their future.

As only a small sample is being surveyed, the participation of each individual is important. Your own personal results will be sent directly to you--most people find it fascinating to look over this information about themselves. Your answers will be kept completely confidential--used only by the University of Minnesota.

Please return the forms promptly. Your help will be very much appreciated.

Sincerely,

David P. Campbell

David P. Campbell
Associate Professor of Psychology
and Director

DPC:jed
Enc.

Example of Follow-up Card

UNIVERSITY OF MINNESOTA
Campus Scene

University skyline with Centennial Showboat in the foreground. The Showboat is now used for the University Summer Theatre productions.

Photo by Larry Witt

AUTHENTIC MINNESOTA SCENE P-3

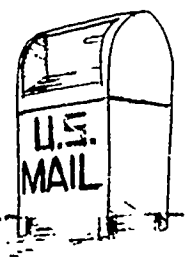
PLACE STAMP HERE

Post Card

HELLO THERE—
Recently I sent you a research form to fill in. If you have already returned it —thanks. If not, I hope you will while it's still near the top of your "things-to-do" list. Each one is important.

DAVID CAMPBELL
U. of M.
Minneapolis 55455

Pub. by Northern Minnesota Novelties, Crosslake, Minnesota



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OFFICE OF THE DEAN OF STUDENTS · STUDENT COUNSELING BUREAU
CENTER FOR INTEREST MEASUREMENT RESEARCH
MINNEAPOLIS, MINNESOTA 55455

MEMORANDUM

TO: RESEARCH PARTICIPANTS

FROM: DAVID P. CAMPBELL

SUBJECT: 14 POINTS TO HELP YOU UNDERSTAND YOUR RESULTS.

Enclosed is your profile from the Strong Vocational Interest Blank (SVIB), an interest inventory that you recently completed in a research project on vocational interests. While I believe strongly that anyone who provides this information deserves the courtesy of a reply, it is difficult to write a personal letter to each person. This pamphlet has been prepared as a substitute; to better understand your scores, you should read it carefully.

Psychological research frequently explores uncharted areas. Neither psychologists nor anyone else really understands the complexities of human behavior and it is painfully clear that questionnaires cannot capture the broad range of emotions, needs, hopes, fears, and other human attributes. Still, these paper-and-pencil methods provide a beginning and a necessary one, for—as the fellow said—what is there to scratch but the surface? Some progress has been made, and over forty years of research have shown that an individual's results on the Strong Blank can help him understand himself and his relation to the world of work, especially when used under the guidance of a trained counselor.

1. Your scores on the SVIB profile indicate the similarity between your interests and those of successful, satisfied individuals in the specified occupations. People in these occupations average about 50 on their own scale (that is, physicians average about 50 on the Physician Scale) and about two-thirds of them will score between 40 and 60. If your score is above 45 on the Physician Scale, it means that your likes and dislikes resemble those of the average physician.

2. The shaded block for each scale represents the scores of the middle third of a group of adults, who were mostly people from professional and high level business occupations. This block will help you compare your score with what would be expected for the average person in such occupations.

3. The occupational scales are arranged on the profile sheet in meaningful groups. By looking at the occupa ons in each group, you can better understand the nature of your high and low scores. For example, several high scores in Group I on the men's profile suggests interests similar to biological scientists. The profile groups have been named as follows:

	Men's Profile	Women's Profile
Group I	Biological Science	I Music
II	Physical Science	II Verbal-Linguistic
III	Technical Supervision	III Social Service
IV	Technical and Skilled Trades	IV Sales
V	Social Service	V Business-Clerical
VI	Aesthetic-Cultural	VI Domestic
VII	CPA Owner	VII Health-related Services
VIII	Business and Accounting	VIII Medical Sciences
IX	Sales	IX Physical Sciences
X	Verbal-Linguistic	
XI	President, Manufacturing Concern	

4. While these groups are helpful in understanding the scores, the unique flavor of each occupation is also important. Each is different from the others; each has its own special characteristics. In the Biological Science group on the Men's Profile, for example, the veterinarians differ from the other occupations in that they are more outdoor-oriented, they are less bothered by uncomfortable working conditions, and they are less interested in "cultural-aesthetic" activities than their colleagues in the other biological sciences.

5. Men seem happiest in jobs that provide them opportunities to tap all of their areas of interests, and many people are very shrewd in searching out such situations. One university student, for example, had high scores on the Author and Advertising Man Scales and a moderately high score on the Forest Service Man Scale. Several years later he reported that he was doing publicity work for the National Park Service and thoroughly enjoyed his work. In another instance, a four-star General who had high scores on the academically-oriented scales (as well as high scores on the Technical-Supervisory Scales—typical of most Army Officers), moved into a college presidency upon his retirement from the Army. The better one understands himself, the greater his chances of finding a suitable vocational niche.

6. At the bottom of the profile are some special scales; most people are curious about them.

A. SPECIALIZATION LEVEL
(SL—not on Women's Profile)

Scores are apparently related to a man's willingness to concentrate his occupational activities in a single field. The scale was developed by comparing medical specialists with general practitioners, the average specialist scores about 50, general practitioners about 40.

B. OCCUPATIONAL LEVEL
(OL—not on Women's Profile)

This scale seems to be related to the "socio-economic" level of one's interests. Corporation presidents and city school superintendents average about 66 carpenters and printers about 49.

C. MASCULINITY-FEMININITY (MF)

This scale compares the interests of men and women; the average man scores 50 on the Men's Profile, the average woman 50 on the Women's Profile. Men are prone to view their scores as relevant to their virility, or lack thereof, but that interpretation is misleading. Those who score low, toward the "feminine" end are simply reporting interests for art, books, music, for working inside, for being considerate of others, for keeping their hands clean—attributes more feminine than masculine in our society. Women who score low on the scale on the Women's Profile are displaying greater interests than the average woman in science, numbers, outdoor sports, mechanical activities, and so forth.

D. ACADEMIC ACHIEVEMENT (AACH)

This scale reflects interests related to "doing-well-in-college." College students who drop out before graduation average about 40, those who earn B.A. degrees about 50, those who earn M.A. degrees about 55, and those achieving the Ph.D. about 60. Of course, there is a great deal of variability in each of those groups. This scale is emphatically *not* a measure of ability, nor of a general potential for success in all settings. More than anything else, it is related to interests in scientific affairs. Scores on this scale increase during the college years.

7. Will your results change over time? Answers to the individual questions of the inventory are reasonably consistent over short time periods. For example, when tested a second time after a thirty day interval, a group of 100 men marked 75 per cent of the items exactly the same. The changes were usually from "Like" (or "Dislike") to "Indifferent" or vice versa. The answers were almost never reversed from "Like" to "Dislike." Over the thirty day period, the scores on the profile were virtually identical.

8. In general, the profile scores are stable over time, especially over short time spans, and especially for adults. After age 25, there are hardly any changes. An average profile for men tested first at age 40 and retested 30 years later at age 70 showed no important changes. Although one or two individuals (out of 50) varied substantially, the overall finding was one of impressive stability.

9. Scores are less stable for teenagers. Most 15 year olds change over time, and probably a majority of 16 year olds. The changes will not be abrupt—they will occur between age 15 and adulthood, which arrives at different times for different people. By age 17, most people begin to stabilize and this trend continues until age 21 or 22 when the adult patterns become prominent in almost everyone. We can neither predict who is going to change drastically nor in what direction, nor do we know much about the factors causing these changes; these are some of the problems that psychologists are now concentrating on.

10. How accurate are these scores? That is difficult to answer, for it depends on just how the question is asked. Let me cite some of the research findings.

A. Men (or women) in an occupation score about 20 points higher on their scale than others not in the occupation, but that is not true for people in closely related jobs. On the Chemist Scale, for example, chemists score 50 while the "average college-educated man" scores about 27; however, mathematicians average about 46 and physicists about 54—higher than the chemists themselves. As these occupations are all oriented toward the physical sciences, the relationships are reasonable. Occupa-

tions scoring low on the Chemist Scale include YMCA Staff Members (12) and Chamber of Commerce Executives (11).

B. In another study, HS senior boys with high scores on selected scales were located 10 years later to determine what occupations they had selected. Seventy-two boys with high scores on the Life Insurance Salesman Scale were in the following occupations 10 years later:

Life Insurance Salesmen	10%
Other types of salesmen	32%
Business-persuasive occupations (Public Relations, Advertising, Lawyer, etc.)	12%
Social Service-Persuasive (Minister, School Teacher, etc.)	22%
Jobs apparently unrelated to persuasive activities	24%

Another 90 boys with high scores on the Physicist Scale were in the following occupations:

Engineers	37%
Mathematicians-Chemists-Physicists	8%
Other scientists	12%
Technical and skilled trades	17%
Jobs apparently unrelated to scientific-technical occupations	25%

About three-fourths of each group were in occupations reasonably consistent with their test results 10 years earlier.

C. Some inconsistent results have been reported by Dr. Charles McArthur, a psychologist at Harvard University. He found that scores on the Strong Blank did not accurately predict the eventual occupations of Harvard students from private high schools. His explanation was that these boys were from a special segment of the socio-economic ladder, and they did not necessarily make career decisions like the rest of us. If your father is an investment banker, and you're attending Harvard, the chances are good that you will become an investment banker, no matter what your interest profile looks like.

11. Are these scores related to satisfaction with the occupation? Yes, I believe so. Supporting data are hard to find, as few people settled into their jobs with several years experience say they dislike their work. When they can be found, they definitely score lower on their occupational scale than do their colleagues. In his extensive research, Professor E. K. Strong, Jr., of Stanford University, (the original author of the Strong Blank) found that men who scored low on the scale for their occupation were four times more likely to say they were dissatisfied with their job than were men who scored high.

12. Are these scores related to success in the occupation? Apparently not. Mediocre men in each occupation—who have at least three years experience and who say they like their jobs—score just as high on their occupational scale as men who are outstanding successes. This is puzzling for interest in an occupation *must* be related to one's success there. The answer probably is that there are several ways to succeed in any one occupation, and those different ways are associated with different patterns of interests. Psychologists who have made significant research contributions have different interests than those who are good therapists. Successful sales engineers have different interests than design engineers. If we knew more about success, we might better understand these relationships.

13. If your score for your occupation is extremely low, should you change careers? That is an extraordinarily important decision, one that must be based on much more information than is provided by this test. If you like what you are doing and are achieving the kind of success that you value, then you should forge ahead. On the other hand, if you suspect that you are not the usual kind of person who enjoys the work you are currently in, if you have little in common with your colleagues, if you cannot mold your job into something more compatible with your interests, if you see nothing ahead but frustration, perhaps you should do some serious thinking. Neither the ethical standards of the psychological profession nor my own inclinations favor personal counseling by form, letter, and you should seek professional advice elsewhere before making any drastic decisions. The counseling center at a nearby university would be a reasonable place to make initial inquiries.

14. For more extensive information, consult the Manual for the Strong Vocational Interest Blank, in your local library or university counseling center, or available for $3.00 (plus postage) from:

The Psychological Corporation
304 East 45 Street
New York, New York 10017

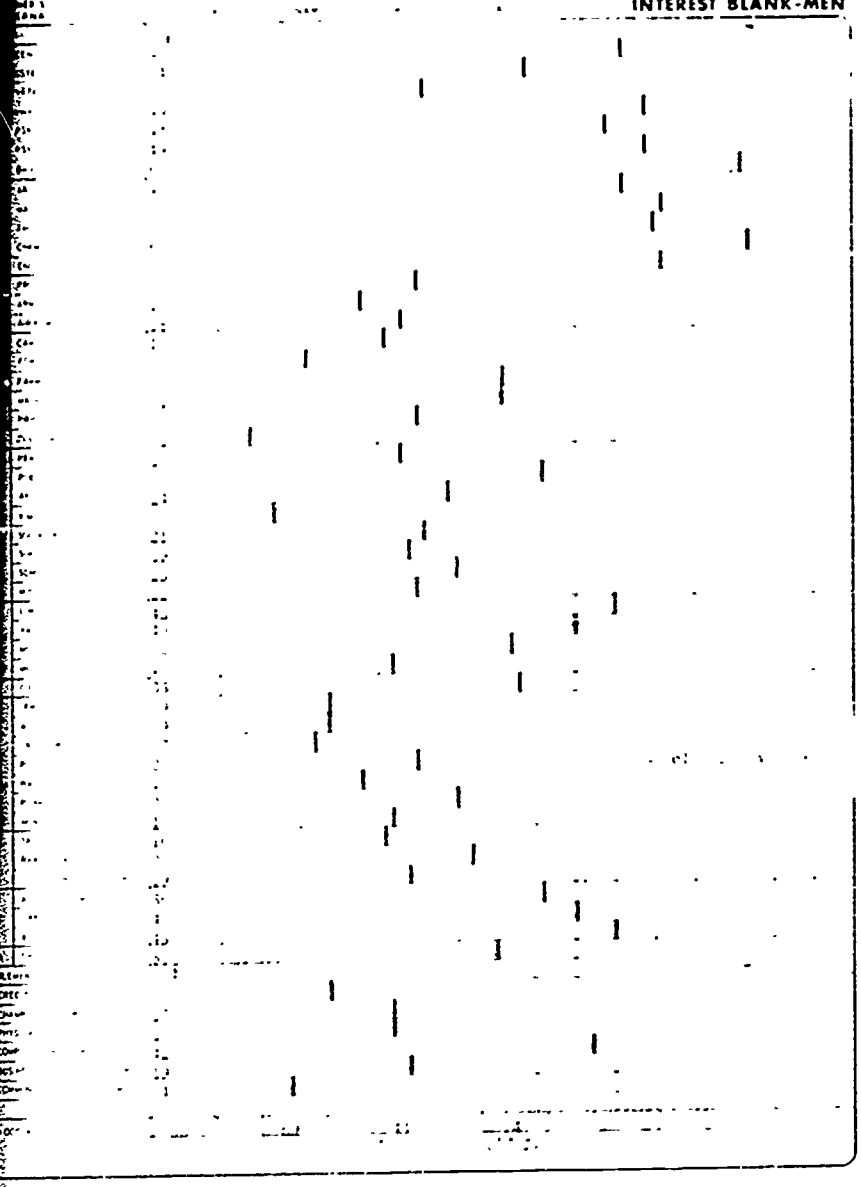
or

Consulting Psychologists Press
577 College Avenue
Palo Alto, California 94306

Once again, thanks for your help. Though I have reduced your answers to simple statistics, suitable only for computers, I do try to remember that I am dealing with human beings—people with worthwhile goals and aggravating obstacles in front of those goals. Your participation has helped me a great deal, and I hope you have enjoyed the experience.

David P. Campbell, *Director*
Center for Interest Measurement Research
101 Eddy Hall
University of Minnesota
Minneapolis, Minnesota 55455

STRONG VOCATIONAL
INTEREST BLANK-MEN



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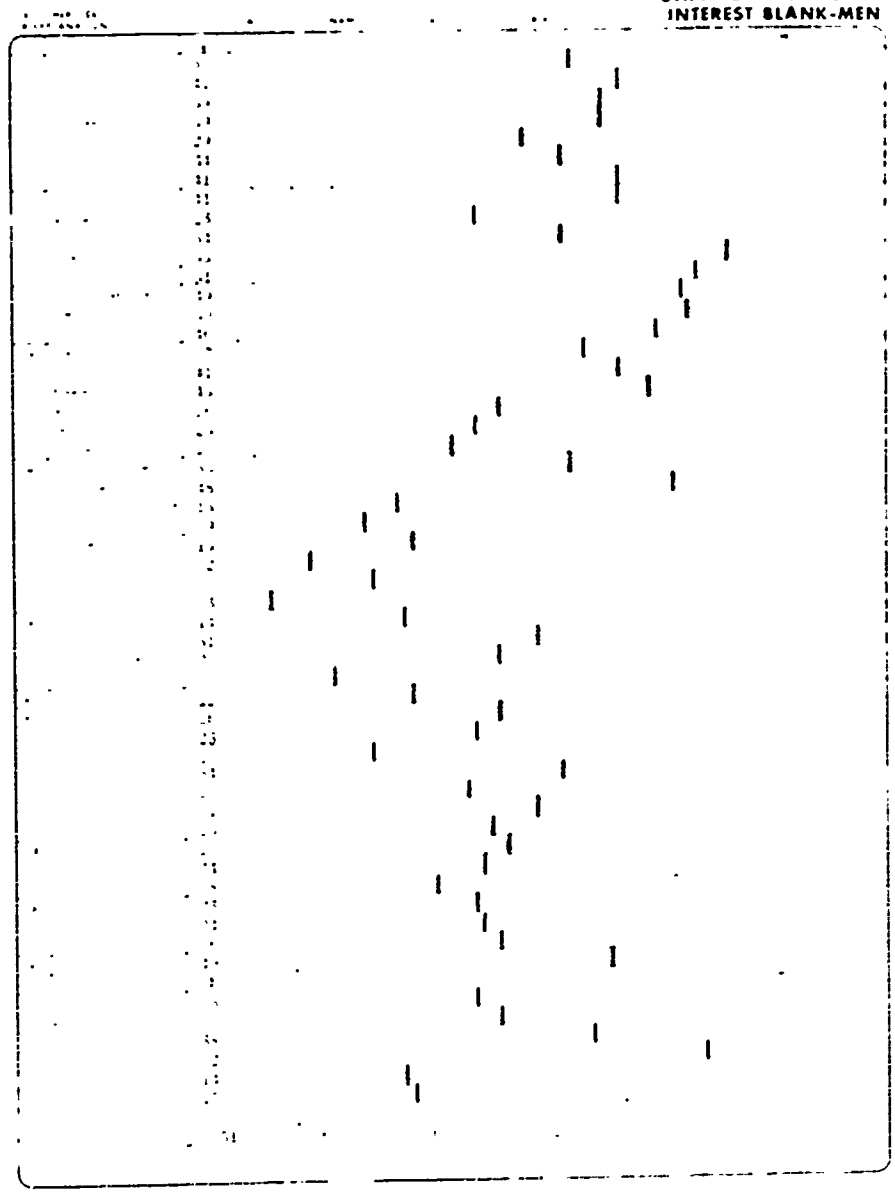
INTEREST BLANK-MEN



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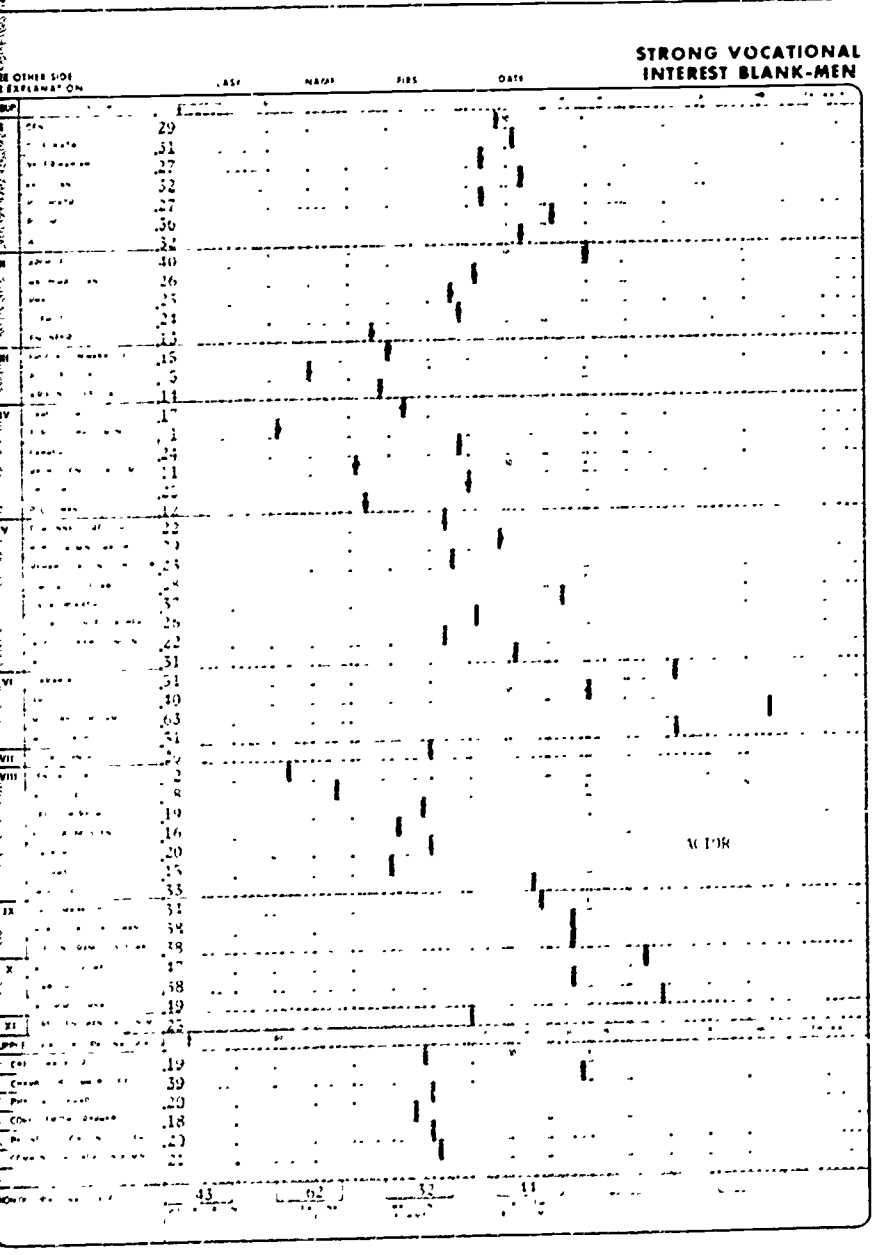
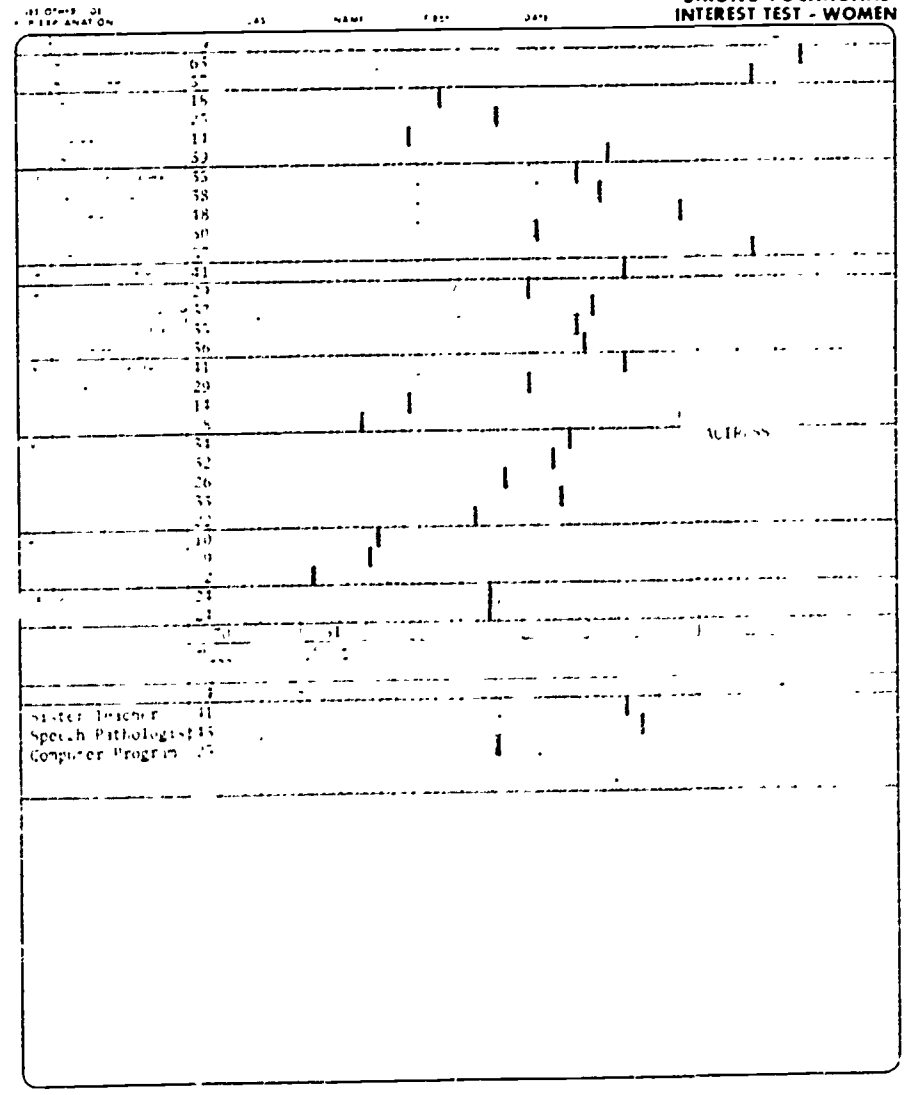


FORM WRA

STRONG VOCATIONAL
INTEREST TEST - WOMEN



Appendix C

Composition of the Women-in-General (total) Sample (N=1000)

Group	N
Art Teacher	20
Artist	20
Beautician	20
Business Education Teacher	20
Chemist	20
Dental Assistant	20
Dietitian	20
Director, Christian Education	20
Elementary Teacher	20
English Teacher	20
Entertainer	20
Executive Housekeeper	20
Fashion Coordinator	20
Home Economics Teacher	20
Instrument Assembler	20
Interior Decorator	20
Language Teacher	20
Librarian	20
Licensed Practical Nurse	20
Life Insurance Underwriter	20
Math-Science Teacher	20
Mathematician	20
Medical Technologist	20
Model	12
Newswoman	20
Occupational Therapist	20
Photographer	20
Physical Education Teacher (H.S.)	20
Physician	20
Psychologist	20
Radiologic Technologist	20
Saleswoman	20
Sewing Machine Operator	20
Social Science Teacher	20
Stewardess	20
Telephone Operator	20
Translator	20
Army-Officer	20
Army-Enlisted	20
Navy-Officer	20
Navy-Enlisted	20
YWCA Staff Member	20
Non-students (misc adults)	25
Twins (H.S.students)	68
Wives-Animal Husbandry Professors	25
Wives-Physicists	25
Wives-Social Workers	25
TOTAL	1000

Appendix C

Composition of the Women-in-General (NP) Sample (N=420)

Group	N
Beautician	40
Dental Assistant	40
Elementary Teacher	40
Executive Housekeeper	40
Instrument Assembler	40
Licensed Practical Nurse	40
Radiologic Technologist	40
Saleswoman	40
Secretary	40
Sewing Machine Operator	40
Army-Enlisted	40
Navy-Enlisted	40
Total	420

Appendix D--Item Weights

Item Weights for Beauticians on WIG-TOTAL Scales

```
      Weight
Item # L  I  D
  1  0  0  0 *  51 -1  0  1 * 101 -1  0  1 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
  2  1  0 -1 *  52  0  0  0 * 102 -1  0  1 * 152 -1  0  1 * 202  0  0  0 * 252  1  0 -1 * 302  0  0  0 * 352  0  0  0 *
  3  0  0  0 *  53 -1  0  1 * 103  0  0  0 * 153  0  0  0 * 203  0  0  0 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
  4  0  0  0 *  54  0  0  0 * 104  0  0  0 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
  5  0  0  0 *  55  0  0  0 * 105  0  0  0 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
  6  0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
  7  0  0  0 *  57  0  0  0 * 107  0  0  0 * 157 -1  0  1 * 207  0  0  0 * 257  0  0  0 * 307  0  0  0 * 357  0  0  0 *
  8  0  0  0 *  58  0  0  0 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
  9 -1  0  1 *  59  0  0  0 * 109  0  0  0 * 159  0  0  0 * 209  0  0  0 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
 10 -1  0  1 *  60 -1  0  1 * 110  1  0 -1 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310  0  0  0 * 360  0  0  0 *
 11 -1  0  1 *  61  1  0 -1 * 111  0  0  0 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311  0  0  0 * 361  0  0  0 *
 12  0  0  0 *  62  0  0  0 * 112  0  0  0 * 162  0  0  0 * 212  0  0  0 * 262  0  0  0 * 312  1 -1 -1 * 362  0  0  0 *
 13  0  0  0 *  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  0  0  0 *
 14  0  0  0 *  64  0  0  0 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
 15  1 -1 -1 *  65  0  0  0 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  0  0  0 * 365  0  0  0 *
 16 -1  0  1 *  66  0  0  0 * 116  0  0  0 * 166  0  0  0 * 216  0  0  0 * 266  1  0 -1 * 316  0  0  0 * 366  0  0  0 *
 17  0  0  0 *  67  0  0  0 * 117 -1  0  1 * 167  0  0  0 * 217  0  0  0 * 267  0  0  0 * 317  0  0  0 * 367 -1  0  1 *
 18  0  0  0 *  68  0  0  0 * 118  0  0  0 * 168  1 -1 -1 * 218  0  0  0 * 268  0  0  0 * 318  0  0  0 * 368  0  0  0 *
 19  0  0  0 *  69 -1  0  1 * 119  0  0  0 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  1  0 -1 * 369 -1  0  1 *
 20  0  0  0 *  70  0  0  0 * 120  0  0  0 * 170 -1  0  1 * 220  0  0  0 * 270  0  0  0 * 320 -1  0  1 * 370  0  0  0 *
 21  0  0  0 *  71  0  0  0 * 121  0  0  0 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  1 -1 -1 *
 22 -1  0  1 *  72  0  0  0 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  0  0  0 * 322  0  0  0 * 372  0  0  0 *
 23  0  0  0 *  73  1  0 -1 * 123  0  0  0 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  0  0  0 *
 24 -1  0  1 *  74  0  0  0 * 124  0  0  0 * 174  0  0  0 * 224  0  0  0 * 274  0  0  0 * 324  1  0 -1 * 374  0  0  0 *
 25  0  0  0 *  75  0  0  0 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  1  0 -1 * 375 -1  0  1 *
 26  0  0  0 *  76  0  0  0 * 126  0  0  0 * 176  0  0  0 * 226  0  0  0 * 276  0  0  0 * 326  0  0  0 * 376  0  0  0 *
 27  0  0  0 *  77  0  0  0 * 127  0  0  0 * 177  0  0  0 * 227  0  0  0 * 277  0  0  0 * 327  1  0 -1 * 377 -1  0  1 *
 28  0  0  0 *  78 -1  0  1 * 128  0  0  0 * 178  1 -1 -1 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378 -1  0  1 *
 29 -1  0  1 *  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279  1  0 -1 * 329 -1  0  1 * 379  0  0  0 *
 30  0  0  0 *  80 -1  0  1 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280 -1  0  1 * 330 -1  0  1 * 380  0  0  0 *
 31  0  0  0 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331  0  0  0 * 381  0  0  0 *
 32  0  0  0 *  82  0  0  0 * 132  0  0  0 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382  0  0  0 *
 33  0  0  0 *  83  0  0  0 * 133  0  0  0 * 183  1 -1 -1 * 233  0  0  0 * 283  0  0  0 * 333 -1  0  1 * 383 -1  0  1 *
 34  1  0 -1 *  84  0  0  0 * 134  0  0  0 * 184 -1  0  1 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384  0  0  0 *
 35 -1  0  1 *  85  0  0  0 * 135  0  0  0 * 185  0  0  0 * 235  0  0  0 * 285  0  0  0 * 335  0  0  0 * 385  0  0  0 *
 36 -1  0  1 *  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286 -1  0  1 * 336  0  0  0 * 386  0  0  0 *
 37  0  0  0 *  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337 -1  0  1 * 387  1  0 -1 *
 38  0  0  0 *  88  0  0  0 * 138  0  0  0 * 188  0  0  0 * 238 -1  0  1 * 288  0  0  0 * 338  0  0  0 * 388 -1  1  1 *
 39  0  0  0 *  89  0  0  0 * 139 -1  0  1 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
 40  0  0  0 *  90  0  0  0 * 140  0  0  0 * 190  0  0  0 * 240 -1  1  1 * 290  0  0  0 * 340  0  0  0 * 390  0  0  0 *
 41  0  0  0 *  91  0  0  0 * 141  0  0  0 * 191 -1  0  1 * 241  0  0  0 * 291  0  0  0 * 341  0  0  0 * 391  0  0  0 *
 42 -1  0  1 *  92  0  0  0 * 142  1  0 -1 * 192  0  0  0 * 242  0  0  0 * 292  1 -1 -1 * 342  0  0  0 * 392 -1  0  1 *
 43  0  0  0 *  93  0  0  0 * 143  0  0  0 * 193 -1  0  1 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
 44  0  0  0 *  94  0  0  0 * 144  0  0  0 * 194 -1  0  1 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
 45  0  0  0 *  95  1  0 -1 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
 46  1  0 -1 *  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  1  0 -1 * 346  0  0  0 * 396 -1  1  1 *
 47  0  0  0 *  97  0  0  0 * 147  0  0  0 * 197  0  0  0 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
 48  1  0 -1 *  98  0  0  0 * 148 -1  0  1 * 198  0  0  0 * 248  0  0  0 * 298  0  0  0 * 348 -1  0  1 * 398  0  0  0 *
 49  0  0  0 *  99  0  0  0 * 149  0  0  0 * 199 -1  0  1 * 249  0  0  0 * 299 -1  1  1 * 349 -1  0  1 * 399  0  0  0 *
 50  0  0  0 * 100 -1  0  1 * 150 -1  0  1 * 200  0  0  0 * 250  0  0  0 * 300  0  0  0 * 350  0  0  0 * 400  0  0  0 *

 77 = NUMBER OF ITEMS WEIGHTED

 81 = NUMBER OF POSITIVE WEIGHTS
 84 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion
Mean=23.82
S.D.=19.60

Item Weights for Beauticians on WIG-NP Scales

```
       Weights
Item # L  I  D
   1   0  0  0 *  51  0  0  0 * 101 -1 -1  1 * 151 -1  0  1 * 201 -1  0  1 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
   2   0  0  0 *  52  0  0  0 * 102 -1  0  1 * 152 -1  0  1 * 202  0  0  0 * 252  0  0  0 * 302  0  0  0 * 352  0  0  0 *
   3  -1  0  1 *  53  0  0  0 * 103  0  0  0 * 153  0  0  0 * 203 -1  0  1 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
   4   0  0  0 *  54 -1  0  1 * 104  0  0  0 * 154  0  0  0 * 204 -1 -1  1 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
   5   0  0  0 *  55  0  0  0 * 105  0  0  0 * 155 -1  0  1 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
   6   0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
   7   0  0  0 *  57  0  0  0 * 107  0  0  0 * 157 -1  0  1 * 207  0  0  0 * 257  0  0  0 * 307  0  0  0 * 357  0  0  0 *
   8   0  0  0 *  58  0  0  0 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
   9   0  0  0 *  59  0  0  0 * 109  0  0  0 * 159 -1  0  1 * 209  0  0  0 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
  10  -1  0  1 *  60 -1  0  1 * 110  0  0  0 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310  0  0  0 * 360  0  0  0 *
  11  -1  0  1 *  61  1  0 -1 * 111 -1  0  1 * 161  0     0 * 211  0  0  0 * 261  0  0  0 * 311  1 -1 -1 * 361  0  0  0 *
  12   0  0  0 *  62  0  0  0 * 112  0  0  0 * 162  0     0 * 212  0  0  0 * 262  0  0  0 * 312  1 -1 -1 * 362  0  0  0 *
  13  -1  0  1 *  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  0  0  0 *
  14   0  0  0 *  64  0  0  0 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
  15   1 -1 -1 *  65  0  0  0 * 115 -1  0  1 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  0  0  0 * 365  0  0  0 *
  16  -1  0  1 *  66  0  0  0 * 116  0  0  0 * 166 -1  0  1 * 216  0  0  0 * 266  0  0  0 * 316 -1  0  1 * 366  0  0  0 *
  17   0  0  0 *  67  0  0  0 * 117  0  0  0 * 167  0  0  0 * 217  0  0  0 * 267  0  0  0 * 317  0  0  0 * 367 -1  0  1 *
  18   0  0  0 *  68  0  0  0 * 118  0  0  0 * 168  1  0 -1 * 218  0  0  0 * 268  0  0  0 * 318  0  0  0 * 368  0  0  0 *
  19   0  0  0 *  69  0  0  0 * 119  0  0  0 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  1  0 -1 * 369 -1  0  1 *
  20   0  0  0 *  70  0  0  0 * 120  0  0  0 * 170 -1  0  1 * 220  0  0  0 * 270  0  0  0 * 320  0  0  0 * 370 -1  0  1 *
  21   0  0  0 *  71  0  0  0 * 121 -1  0  1 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  0  0  0 *
  22  -1  0  1 *  72 -1  0  1 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  0  0  0 * 322  0  0  0 * 372  0  0  0 *
  23  -1  0  1 *  73  0  0  0 * 123  0  0  0 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  0  0  0 *
  24  -1  0  1 *  74 -1 -1  1 * 124  0  0  0 * 174 -1  0  1 * 224  0  0  0 * 274  0  0  0 * 324  0  0  0 * 374  0  0  0 *
  25   0  0  0 *  75 -1  0  1 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375 -1  0  1 *
  26   0  0  0 *  76  0  0  0 * 126 -1  0  1 * 176  0  0  0 * 226  0  0  0 * 276  0  0  0 * 326  1  0 -1 * 376 -1  0  1 *
  27   0  0  0 *  77 -1  0  1 * 127  0  0  0 * 177 -1  0  1 * 227  0  0  0 * 277 -1  1  1 * 327  1 -1 -1 * 377 -1  0  1 *
  28   0  0  0 *  78 -1  0  1 * 128 -1  0  1 * 178  0  0  0 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378 -1  0  1 *
  29  -1  0  1 *  79  0  0  0 * 129 -1  0  1 * 179  0  0  0 * 229  0  0  0 * 279  1  0 -1 * 329 -1  0  1 * 379 -1  0  1 *
  30   0  0  0 *  80 -1  0  1 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280 -1  0  1 * 330 -1  0  1 * 380  0  0  0 *
  31   0  0  0 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331  0  0  0 * 381  0  0  0 *
  32   0  0  0 *  82  0  0  0 * 132  0  0  0 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382  0  0  0 *
  33   0  0  0 *  83  0  0  0 * 133  0  0  0 * 183  0  0  0 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383  0  0  0 *
  34   1  0 -1 *  84  0  0  0 * 134  0  0  0 * 184  0  0  0 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384  0  0  0 *
  35   0  0  0 *  85  0  0  0 * 135  0  0  0 * 185  0  0  0 * 235 -1  1  1 * 285 -1  0  1 * 335  0  0  0 * 385  0  0  0 *
  36  -1  0  1 *  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286 -1  0  1 * 336  0  0  0 * 386  0  0  0 *
  37   0  0  0 *  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337 -1  0  1 * 387  0  0  0 *
  38  -1 -1  1 *  88  0  0  0 * 138  0  0  0 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388 -1  0  1 *
  39   0  0  0 *  89  0  0  0 * 139  0  0  0 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
  40   0  0  0 *  90  0  0  0 * 140  0  0  0 * 190  0  0  0 * 240 -1  1  1 * 290  0  0  0 * 340  0  0  0 * 390 -1  0  1 *
  41   0  0  0 *  91  0  0  0 * 141  0  0  0 * 191 -1  0  1 * 241  0  0  0 * 291 -1  0  1 * 341  0  0  0 * 391  0  0  0 *
  42   0  0  0 *  92  0  0  0 * 142  0  0  0 * 192 -1  0  1 * 242  0  0  0 * 292  1 -1 -1 * 342  0  0  0 * 392 -1  0  1 *
  43   0  0  0 *  93  0  0  0 * 143  0  0  0 * 193 -1  0  1 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
  44   0  0  0 *  94  0  0  0 * 144  0  0  0 * 194 -1  0  1 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
  45   0  0  0 *  95  0  0  0 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
  46   1  0 -1 *  96 -1  0  1 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396 -1  1  1 *
  47   0  0  0 *  97  0  0  0 * 147  0  0  0 * 197  0  0  0 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
  48   0  0  0 *  98  0  0  0 * 148  0  0  0 * 198  0  0  0 * 248  0  0  0 * 298  0  0  0 * 348 -1  0  1 * 398  0  0  0 *
  49   0  0  0 *  99  0  0  0 * 149  0  0  0 * 199 -1  0  1 * 249  0  0  0 * 299 -1  0  1 * 349 -1  0  1 * 399  0  0  0 *
  50   0  0  0 * 100 -1  0  1 * 150 -1  0  1 * 200  0  0  0 * 250  0  0  0 * 300  0  0  0 * 350  0  0  0 * 400  0  0  0 *

  65 = NUMBER OF ITEMS WEIGHTED

  90 = NUMBER OF POSITIVE WEIGHTS
  94 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion
Mean=24.66
S.D.=24.96

Item Weights for Dental Assistants on WIG-TOTAL Scales

Weights

Item #	L	I	D																												
1	0	0	0	51	0	0	0	101	0	0	0	151	0	0	0	201	0	0	0	251	0	0	0	301	0	0	0	351	1	0	-1
2	1	-1	-1	52	0	0	0	102	0	0	0	152	-1	1	1	202	0	0	0	252	0	0	0	302	0	0	0	352	0	0	0
3	0	0	0	53	-1	0	1	103	0	0	0	153	0	0	0	203	1	0	-1	253	0	0	0	303	1	-1	-1	353	0	0	0
4	0	0	0	54	1	-1	-1	104	0	0	0	154	0	0	0	204	0	0	0	254	0	0	0	304	0	0	0	354	0	0	0
5	-1	0	1	55	0	0	0	105	0	0	0	155	0	0	0	205	0	0	0	255	0	0	0	305	0	0	0	355	0	0	0
6	-1	0	1	56	0	0	0	106	0	0	0	156	0	0	0	206	0	0	0	256	0	0	0	306	0	0	0	356	0	0	0
7	0	0	0	57	0	0	0	107	0	0	0	157	0	0	0	207	0	0	0	257	1	0	-1	307	0	0	0	357	0	0	0
8	0	0	0	58	0	0	0	108	0	0	0	158	0	0	0	208	0	0	0	258	0	0	0	308	0	0	0	358	0	0	0
9	-1	0	1	59	0	0	0	109	1	1	-1	159	0	0	0	209	1	0	-1	259	0	0	0	309	0	0	0	359	0	0	0
10	-1	0	1	60	-1	0	1	110	1	0	-1	160	0	0	0	210	0	0	0	260	0	0	0	310	0	0	0	360	0	0	0
11	0	0	0	61	0	0	0	111	1	0	-1	161	0	0	0	211	0	0	0	261	0	0	0	311	-1	0	1	361	0	0	0
12	0	0	0	62	0	0	0	112	0	0	0	162	0	0	0	212	0	0	0	262	0	0	0	312	0	0	0	362	0	0	0
13	1	0	-1	63	0	0	0	113	0	0	0	163	0	0	0	213	0	0	0	263	0	0	0	313	0	0	0	363	0	0	0
14	0	0	0	64	0	0	0	114	0	0	0	164	0	0	0	214	0	0	0	264	0	0	0	314	0	0	0	364	0	0	0
15	1	0	-1	65	1	0	-1	115	0	0	0	165	-1	0	1	215	0	0	0	265	0	0	0	315	0	0	0	365	0	0	0
16	1	0	-1	66	0	0	0	116	0	0	0	166	0	0	0	216	0	0	0	266	0	0	0	316	1	-1	-1	366	1	0	-1
17	1	0	-1	67	0	0	0	117	-1	0	1	167	1	0	-1	217	0	0	0	267	1	0	-1	317	0	0	0	367	0	0	0
18	0	0	0	68	-1	0	1	118	0	0	0	168	0	0	0	218	0	0	0	268	0	0	0	318	0	0	0	368	0	0	0
19	-1	0	1	69	0	0	0	119	0	0	0	169	0	0	0	219	0	0	0	269	1	-1	-1	319	1	1	-1	369	0	0	0
20	0	0	0	70	0	0	0	120	0	0	0	170	0	0	0	220	0	0	0	270	0	0	0	320	0	0	0	370	0	0	0
21	0	0	0	71	0	0	0	121	1	1	-1	171	0	0	0	221	0	0	0	271	0	0	0	321	0	0	0	371	1	0	-1
22	0	0	0	72	1	-1	-1	122	0	0	0	172	0	0	0	222	0	0	0	272	1	1	-1	322	0	0	0	372	0	0	0
23	0	0	0	73	0	0	0	123	1	1	-1	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	0	0	0
24	-1	1	1	74	1	1	-1	124	0	0	0	174	1	-1	-1	224	0	0	0	274	-1	0	1	324	0	0	0	374	0	0	0
25	0	0	0	75	1	0	-1	125	0	0	0	175	0	0	0	225	0	0	0	275	-1	0	1	325	0	0	0	375	0	0	0
26	0	0	0	76	0	0	0	126	0	0	0	176	0	0	0	226	0	0	0	276	0	0	0	326	0	0	0	376	0	0	0
27	0	0	0	77	1	0	-1	127	1	=1	-1	177	0	0	0	227	0	0	0	277	0	0	0	327	0	0	0	377	0	0	0
28	0	0	0	78	1	0	-1	128	0	0	0	178	1	0	-1	228	0	0	0	278	0	0	0	328	0	0	0	378	0	0	0
29	0	0	0	79	0	0	0	129	0	0	0	179	0	0	0	229	0	0	0	279	1	0	-1	329	0	0	0	379	0	0	0
30	1	0	-1	80	-1	0	1	130	0	0	0	180	0	0	0	230	0	0	0	280	0	0	0	330	0	0	0	380	0	0	0
31	1	0	-1	81	0	0	0	131	0	0	0	181	0	0	0	231	0	0	0	281	0	0	0	331	0	0	0	381	0	0	0
32	0	0	0	82	0	0	0	132	0	0	0	182	0	0	0	232	0	0	0	282	0	0	0	332	0	0	0	382	0	0	0
33	-1	0	1	83	1	0	-1	133	0	0	0	183	1	0	-1	233	0	0	0	283	0	0	0	333	0	0	0	383	0	0	0
34	0	0	0	84	0	0	0	134	0	0	0	184	0	0	0	234	0	0	0	284	0	0	0	334	0	0	0	384	0	0	0
35	-1	0	1	85	1	0	-1	135	0	0	0	185	0	0	0	235	1	0	-1	285	0	0	0	335	0	0	0	385	0	0	0
36	0	0	0	86	0	0	0	136	0	0	0	186	0	0	0	236	0	0	0	286	0	0	0	336	0	0	0	386	0	0	0
37	0	0	0	87	0	0	0	137	0	0	0	187	0	0	0	237	0	0	0	287	0	0	0	337	0	0	0	387	1	0	-1
38	0	0	0	88	0	0	0	138	0	0	0	188	0	0	0	238	0	0	0	288	0	0	0	338	1	0	-1	388	0	0	0
39	0	0	0	89	0	0	0	139	0	0	0	189	0	0	0	239	0	0	0	289	0	0	0	339	0	0	0	389	0	0	0
40	0	0	0	90	0	0	0	140	0	0	0	190	0	0	0	240	0	0	0	290	0	0	0	340	0	0	0	390	0	0	0
41	0	0	0	91	0	0	0	141	0	0	0	191	-1	1	1	241	0	0	0	291	0	0	0	341	-1	0	1	391	0	0	0
42	0	0	0	92	0	0	0	142	0	0	0	192	1	1	-1	242	0	0	0	292	0	0	0	342	0	0	0	392	-1	0	1
43	0	0	0	93	0	0	0	143	0	0	0	193	-1	0	1	243	0	0	0	293	0	0	0	343	0	0	0	393	0	0	0
44	1	1	-1	94	0	0	0	144	1	0	-1	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	0	0	0
45	0	0	0	95	1	-1	-1	145	0	0	0	195	0	0	0	245	0	0	0	295	0	0	0	345	1	0	-1	395	0	0	0
46	1	0	-1	96	0	0	0	146	0	0	0	196	0	0	0	246	0	0	0	296	1	0	-1	346	0	0	0	396	0	0	0
47	0	0	0	97	0	0	0	147	0	0	0	197	1	0	-1	247	0	0	0	297	0	0	0	347	0	0	0	397	0	0	0
48	1	0	-1	98	0	0	0	148	0	0	0	198	0	0	0	248	0	0	0	298	0	0	0	348	0	0	0	398	0	0	0
49	-1	1	1	99	0	0	0	149	0	0	0	199	0	0	0	249	0	0	0	299	0	0	0	349	0	0	0	399	0	0	0
50	0	0	0	100	0	0	0	150	0	0	0	200	0	0	0	250	1	0	-1	300	0	0	0	350	0	0	0	400	0	0	0

75 = NUMBER OF ITEMS WEIGHTED

87 = NUMBER OF POSITIVE WEIGHTS
84 = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean=24.64
S.D.=15.16

Item Weights for Dental Assistants on WIG-NF Scales

Item #	Weights L	I	D	*	51			*	101			*	151			*	201			*	251			*	301			*	351			*
1		0		*	51			*	101	0	0	*	151			*	201	0	0	*	251	0	0	*	301			-1	*	351	0	0	*
2	1	-1	-1	*	52	0	0	*	102	0	0	*	152	0	0	*	202	0	0	*	252	0	0	*	302	0	0	*	352	0	0	*
3		0		*	53	0	0	*	103	0	0	*	153	0	0	*	203	1	0	-1	253	0	0	*	303	0	0	*	353	0	0	*
4		0		*	54	1	0	-1	104	0	0	*	154	0	0	*	204	0	0	*	254	0	0	*	304	0	0	*	354	0	0	*
5		0		*	55	0	0	*	105	0	0	*	155	0	0	*	205	0	0	*	255	0	0	*	305	0	0	*	355	0	0	*
6		0		*	56	0	0	*	106	0	0	*	156	0	0	*	206	0	0	*	256	0	0	*	306	0	0	*	356	0	0	*
7		0		*	57	0	0	*	107	0	0	*	157	0	0	*	207	0	0	*	257	0	0	*	307	0	0	*	357	0	0	*
8		0		*	58	0	0	*	108	0	0	*	158	0	0	*	208	0	0	*	258	0	0	*	308	0	0	*	358	0	0	*
9		0		*	59	0	0	*	109	0	0	*	159	0	0	*	209	0	0	*	259	0	0	*	309	0	0	*	359	0	0	*
10		0		*	60	0	0	*	110	0	0	*	160	0	0	*	210	0	0	*	260	0	0	*	310	0	0	*	360	0	0	*
11		0		*	61	0	0	*	111	0	0	*	161	0	0	*	211	0	0	*	261	0	0	*	311	0	0	*	361	0	0	*
12				*	62	0	0	*	112	1	0	-1	162	0	0	*	212	0	0	*	262	0	0	*	312	0	0	*	362	0	0	*
13	1		-1	*	63	0	0	*	113	0	0	*	163	0	0	*	213	0	0	*	263	0	0	*	313	0	0	*	363	0	0	*
14		0		*	64	0	0	*	114	0	0	*	164	0	0	*	214	0	0	*	264	0	0	*	314	0	0	*	364	0	0	*
15		0		*	65	0	0	*	115	0	0	*	165	0	0	*	215	0	0	*	265	0	0	*	315	0	0	*	365	0	0	*
16	1	0	-1	*	66	0	0	*	116	0	0	*	166	0	0	*	216	0	0	*	266	0	0	*	316	0	0	*	366	0	0	*
17		0		*	67	0	0	*	117	0	0	*	167	0	0	*	217	0	0	*	267	0	0	*	317	0	0	*	367	0	0	*
18		0		*	68	0	0	*	118	0	0	*	168	0	0	*	218	0	0	*	268	0	0	*	318	0	0	*	368	0	0	*
19		0		*	69	0	0	*	119	0	0	*	169	0	0	*	219	0	0	*	269	1	-1	-1	319	0	0	*	369	0	0	*
20		0		*	70	0	0	*	120	0	0	*	170	0	0	*	220	0	0	*	270	0	0	*	320	0	0	*	370	0	0	*
21		0		*	71	0	0	*	121	0	0	*	171	0	0	*	221	0	0	*	271	0	0	*	321	0	0	*	371	0	0	*
22		0		*	72	1	-1	-1	122	0	0	*	172	0	0	*	222	0	0	*	272	0	0	*	322	0	0	*	372	0	0	*
23		0		*	73	0	0	*	123	0	0	*	173	0	0	*	223	0	0	*	273	0	0	*	323	0	0	*	373	0	0	*
24		0		*	74	0	0	*	124	0	0	*	174	0	0	*	224	0	0	*	274	0	0	*	324	0	0	*	374	0	0	*
25	-1	0	1	*	75	0	0	*	125	0	0	*	175	0	0	*	225	0	0	*	275	0	0	*	325	0	0	*	375	0	0	*
26		0		*	76	0	0	*	126	0	0	*	176	0	0	*	226	0	0	*	276	0	0	*	326	-1	-1	1	*	376	0	0	*
27		0		*	77	1	-1	-1	127	1	0	-1	177	0	0	*	227	0	0	*	277	0	0	*	327	0	0	*	377	0	0	*
28		0		*	78	1	-1	-1	128	0	0	*	178	0	0	*	228	0	0	*	278	0	0	*	328	0	0	*	378	0	0	*
29		0		*	79	0	0	*	129	0	0	*	179	0	0	*	229	0	0	*	279	0	0	*	329	0	0	*	379	0	0	*
30	1	-1	-1	*	80	0	0	*	130	0	0	*	180	0	0	*	230	0	0	*	280	0	0	*	330	0	0	*	380	0	0	*
31		0		*	81	0	0	*	131	0	0	*	181	0	0	*	231	0	0	*	281	0	0	*	331	0	0	*	381	0	0	*
32		0		*	82	0	0	*	132	0	0	*	182	0	0	*	232	0	0	*	282	0	0	*	332	0	0	*	382	0	0	*
33		0		*	83	0	0	*	133	0	0	*	183	0	0	*	233	0	0	*	283	0	0	*	333	0	0	*	383	0	0	*
34		0		*	84	0	0	*	134	0	0	*	184	0	0	*	234	0	0	*	284	0	0	*	334	0	0	*	384	0	0	*
35		0		*	85	1	0	-1	135	0	0	*	185	0	0	*	235	0	0	*	285	0	0	*	335	0	0	*	385	0	0	*
36		0		*	86	0	0	*	136	0	0	*	186	0	0	*	236	0	0	*	286	1	0	-1	336	0	0	*	386	0	0	*
37		0		*	87	0	0	*	137	0	0	*	187	0	0	*	237	0	0	*	287	0	0	*	337	0	0	*	387	0	0	*
38		0		*	88	0	0	*	138	0	0	*	188	0	0	*	238	0	0	*	288	0	0	*	338	0	0	*	388	0	0	*
39		0		*	89	0	0	*	139	0	0	*	189	0	0	*	239	0	0	*	289	0	0	*	339	0	0	*	389	0	0	*
40		0		*	90	0	0	*	140	0	0	*	190	0	0	*	240	0	0	*	290	0	0	*	340	0	0	*	390	0	0	*
41		0		*	91	0	0	*	141	0	0	*	191	0	0	*	241	0	0	*	291	0	0	*	341	0	0	*	391	0	0	*
42		0		*	92	0	0	*	142	0	0	*	192	0	0	*	242	0	0	*	292	-1	0	1	*	342	0	0	*	392	0	0	*
43		0		*	93	0	0	*	143	0	0	*	193	0	0	*	243	0	0	*	293	0	0	*	343	0	0	*	393	0	0	*
44		0		*	94	0	0	*	144	1	0	-1	194	0	0	*	244	0	0	*	294	0	0	*	344	0	0	*	394	0	0	*
45		0		*	95	1	-1	-1	145	0	0	*	195	0	0	*	245	0	0	*	295	0	0	*	345	1	0	-1	*	395	0	0	*
46		0		*	96	0	0	*	146	0	0	*	196	0	0	*	246	0	0	*	296	0	0	*	346	0	0	*	396	0	0	*
47		0		*	97	0	0	*	147	0	0	*	197	0	0	*	247	0	0	*	297	0	0	*	347	0	0	*	397	0	0	*
48		0		*	98	0	0	*	148	0	0	*	198	0	0	*	248	0	0	*	298	0	0	*	348	0	0	*	398	0	0	*
49		0		*	99	0	0	*	149	0	0	*	199	0	0	*	249	0	0	*	299	0	0	*	349	0	0	*	399	0	0	*
50		0		*	100	0	0	*	150	1	0	-1	200	0	0	*	250	0	0	*	300	0	0	*	350	0	0	*	400	0	0	*

23 = NUMBER OF ITEMS WEIGHTED

25 = NUMBER OF POSITIVE WEIGHTS
26 = NUMBER OF NEGATIVE WEIGHTS

For Conversion
Mean= 9.27
S.D.= 6.30

Item Weights for Elementary Teachers on WIG-TOTAL Scales

```
     Weights
Item #L  I  D
   1  0  0  0 .  51  0  0  0 * 101  0  0  0 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
   2  0  0  0 .  52  0  0  0 * 102  0  0  0 * 152  0  0  0 * 202  0  0  0 * 252  0  0  0 * 302  0  0  0 * 352  0  0  0 *
   3  0  0  0 .  53  0  0  0 * 103  0  0  0 * 153  1 -1 -1 * 203  0  0  0 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
   4  0  0  0 .  54  0  0  0 * 104  1  0 -1 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
   5 -1  0  1 .  55  0  0  0 * 105  0  0  0 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
   6  0  0  0 .  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
   7  0  0  0 .  57  0  0  0 * 107  0  0  0 * 157  1  0 -1 * 207  0  0  0 * 257  1 -1 -1 * 307 -1  0  1 * 357  0  0  0 *
   8  0  0  0 .  58  1 -1 -1 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
   9  1 -1 -1 .  59  0  0  0 * 109  1  1 -1 * 159  0  0  0 * 209  1 -1 -1 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
  10  0  0  0 .  60  0  0  0 * 110  0  0  0 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310 -1  0  1 * 360  0  0  0 *
  11  0  0  0 .  61  0  0  0 * 111  0  0  0 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311  0  0  0 * 361  0  0  0 *
  12  0  0  0 .  62  0  0  0 * 112  1  0 -1 * 162  0  0  0 * 212  0  0  0 * 262  0  0  0 * 312  0  0  0 * 362  0  0  0 *
  13  0  0  0 .  63  0  0  0 * 113  1  1 -1 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  1  0 -1 *
  14  0  0  0 .  64  0  0  0 * 114  0  0  0 * 164  1  0 -1 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
  15  0  0  0 .  65  1  0 -1 * 115  1  0 -1 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  0  0  0 * 365  0  0  0 *
  16  0  0  0 .  66  1  1 -1 * 116  1 -1 -1 * 166  0  0  0 * 216  0  0  0 * 266  0  0  0 * 316  0  0  0 * 366  0  0  0 *
  17  0  0  0 .  67  1  0 -1 * 117  0  0  0 * 167  0  0  0 * 217  0  0  0 * 267  0  0  0 * 317 -1  0  1 * 367  0  0  0 *
  18  0  0  0 .  68  0  0  0 * 118  1  0 -1 * 168  0  0  0 * 218  0  0  0 * 268 -1 -1  1 * 318 -1  0  1 * 368  0  0  0 *
  19  0  0  0 .  69  0  0  0 * 119  1  0 -1 * 169  1  0 -1 * 219  0  0  0 * 269  0  0  0 * 319  0  0  0 * 369  0  0  0 *
  20  1  1 -1 .  70  0  0  0 * 120  1  0 -1 * 170  0  0  0 * 220  0  0  0 * 270  0  0  0 * 320  0  0  0 * 370  0  0  0 *
  21  0  0  0 .  71  0  0  0 * 121  0  0  0 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  1  0 -1 *
  22  0  0  0 .  72  0  0  0 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  0  0  0 * 322  1  0 -1 * 372  0  0  0 *
  23  0  0  0 .  73  0  0  0 * 123  1  1 -1 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  1 -1 -1 *
  24  0  0  0 .  74  1  1 -1 * 124  0  0  0 * 174  0  0  0 * 224  0  0  0 * 274  0  0  0 * 324  1  0 -1 * 374  0  0  0 *
  25  0  0  0 .  75  0  0  0 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375  0  0  0 *
  26  0  0  0 .  76  0  0  0 * 126  0  0  0 * 176  0  0  0 * 226  1 -1 -1 * 276  0  0  0 * 326  0  0  0 * 376  0  0  0 *
  27  0  0  0 .  77  0  0  0 * 127  0  0  0 * 177  0  0  0 * 227  1 -1 -1 * 277  0  0  0 * 327  0  0  0 * 377  0  0  0 *
  28  0  0  0 .  78  0  0  0 * 128  0  0  0 * 178  1  0 -1 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378  0  0  0 *
  29  0  0  0 .  79  1  0 -1 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279  0  0  0 * 329  0  0  0 * 379  0  0  0 *
  30  0  0  0 .  80  0  0  0 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280  0  0  0 * 330  0  0  0 * 380 -1  1  1 *
  31  0  0  0 .  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331 -1  0  1 * 381  0  0  0 *
  32  0  0  0 .  82  0  0  0 * 132  0  0  0 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382 -1  1  1 *
  33  0  0  0 .  83  0  0  0 * 133  0  0  0 * 183  1 -1 -1 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383  0  0  0 *
  34  0  0  0 .  84  0  0  0 * 134  0  0  0 * 184  0  0  0 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384  0  0  0 *
  35  0  0  0 .  85  0  0  0 * 135  0  0  0 * 185  0  0  0 * 235  0  0  0 * 285  0  0  0 * 335  0  0  0 * 385  0  0  0 *
  36  1  0 -1 .  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286 -1  0  1 * 336  0  0  0 * 386  0  0  0 *
  37  0  0  0 .  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  1  0 -1 *
  38  0  0  0 .  88  0  0  0 * 138  1  0 -1 * 188  0  0  0 * 238 -1  0  1 * 288  0  0  0 * 338  0  0  0 * 388  0  0  0 *
  39  1  0 -1 .  89  1  1 -1 * 139  1  0 -1 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
  40  0  0  0 .  90  0  0  0 * 140  0  0  0 * 190  1 -1 -1 * 240  0  0  0 * 290  0  0  0 * 340  0  0  0 * 390  0  0  0 *
  41  0  0  0 .  91  0  0  0 * 141  0  0  0 * 191  0  0  0 * 241  0  0  0 * 291  0  0  0 * 341  0  0  0 * 391  0  0  0 *
  42  0  0  0 .  92  0  0  0 * 142  0  0  0 * 192  0  0  0 * 242  0  0  0 * 292  0  0  0 * 342  0  0  0 * 392  0  0  0 *
  43  1  0 -1 .  93  0  0  0 * 143  0  0  0 * 193  0  0  0 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
  44  1  1 -1 .  94  0  0  0 * 144  0  0  0 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
  45  0  0  0 .  95  1  0 -1 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
  46  1  0 -1 .  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396  0  0  0 *
  47  0  0  0 .  97  0  0  0 * 147  0  0  0 * 197  0  0  0 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
  48  1  0 -1 .  98  0  0  0 * 148  0  0  0 * 198  0  0  0 * 248  1 -1 -1 * 298 -1  0  1 * 348  0  0  0 * 398  0  0  0 *
  49  0  0  0 .  99  0  0  0 * 149  1 -1 -1 * 199  0  0  0 * 249  0  0  0 * 299  1 -1 -1 * 349  0  0  0 * 399  0  0  0 *
  50  0  0  0   100  0  0  0 * 150  0  0  0 * 200  0  0  0 * 250  0  0  0 * 300  0  0  0 * 350  0  0  0 * 400  0  0  0 *

 60 =  NUMBER OF ITEMS WEIGHTED

 70 =  NUMBER OF POSITIVE WEIGHTS
 75 =  NUMBER OF NEGATIVE WEIGHTS
```

For Conversion:
Mean=20.93
S.D.=15.09

Item Weights for Elementary Teachers on

Weights

Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D
1	0	0	0	51	0	0	0	101	0	0	0	151	0	0	0	201	0	0	0	251	0	0	0	301	0	0	0	351	0	0	0
2	-1	0	1	52	0	0	0	102	0	0	0	152	1	0	-1	202	0	0	0	252	-1	1	1	302	0	0	0	352	0	0	0
3	0	0	0	53	0	0	0	103	0	0	0	153	0	0	0	203	-1	0	1	253	0	0	0	303	0	0	0	353	0	0	0
4	0	0	0	54	-1	1	1	104	1	0	-1	154	0	0	0	204	0	0	0	254	0	0	0	304	0	0	0	354	0	0	0
5	0	0	0	55	0	0	0	105	-1	0	1	155	0	0	0	205	0	0	0	255	-1	1	1	305	0	0	0	355	0	0	0
6	0	0	0	56	0	0	0	106	0	0	0	156	0	0	0	206	0	0	0	256	0	0	0	306	0	0	0	356	0	0	0
7	0	0	0	57	-1	0	1	107	0	0	0	157	1	-1	-1	207	0	0	0	257	0	0	0	307	-1	0	1	357	0	0	0
8	0	0	0	58	1	-1	-1	108	0	0	0	158	0	0	0	208	0	0	0	258	0	0	0	308	0	0	0	358	0	0	0
9	1	-1	-1	59	0	0	0	109	0	0	0	159	0	0	0	209	0	0	0	259	0	0	0	309	0	0	0	359	0	0	0
10	0	0	0	60	0	0	0	110	0	0	0	160	0	0	0	210	0	0	0	260	0	0	0	310	-1	0	1	360	0	0	0
11	0	0	0	61	0	0	0	111	-1	0	1	161	0	0	0	211	0	0	0	261	0	0	0	311	0	0	0	361	0	0	0
12	0	0	0	62	0	0	0	112	1	0	-1	162	1	0	-1	212	0	0	0	262	0	0	0	312	0	0	0	362	0	0	0
13	-1	0	1	63	0	0	0	113	0	0	0	163	0	0	0	213	0	0	0	263	0	0	0	313	0	0	0	363	0	0	0
14	0	0	0	64	0	0	0	114	0	0	0	164	0	0	0	214	0	0	0	264	0	0	0	314	0	0	0	364	1	0	-1
15	-1	0	1	65	0	0	0	115	0	0	0	165	0	0	0	215	0	0	0	265	0	0	0	315	0	0	0	365	0	0	0
16	0	0	0	66	0	0	0	116	1	-1	-1	166	0	0	0	216	0	0	0	266	-1	0	1	316	0	0	0	366	-1	0	1
17	0	0	0	67	0	0	0	117	0	0	0	167	-1	0	1	217	0	0	0	267	0	0	0	317	-1	0	1	367	0	0	0
18	0	0	0	68	1	0	-1	118	1	0	-1	168	0	0	0	218	0	0	0	268	-1	-1	1	318	0	0	0	368	0	0	0
19	0	0	0	69	0	0	0	119	1	0	-1	169	0	0	0	219	0	0	0	269	0	0	0	319	0	0	0	369	0	0	0
20	0	0	0	70	0	0	0	120	0	0	0	170	1	0	-1	220	0	0	0	270	0	0	0	320	0	0	0	370	0	0	0
21	0	0	0	71	0	0	0	121	-1	0	1	171	0	0	0	221	0	0	0	271	0	0	0	321	0	0	0	371	0	0	0
22	0	0	0	72	0	0	0	122	0	0	0	172	0	0	0	222	0	0	0	272	-1	-1	1	322	0	0	0	372	0	0	0
23	0	0	0	73	0	0	0	123	0	0	0	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	1	-1	-1
24	1	0	-1	74	0	0	0	124	0	0	0	174	-1	0	1	224	0	0	0	274	1	0	-1	324	0	0	0	374	-1	1	1
25	-1	0	1	75	-1	0	1	125	0	0	0	175	0	0	0	225	0	0	0	275	1	0	-1	325	0	0	0	375	0	0	0
26	0	0	0	76	0	0	0	126	0	0	0	176	0	0	0	226	0	0	0	276	1	0	-1	326	0	0	0	376	0	0	0
27	0	0	0	77	0	0	0	127	-1	1	1	177	0	0	0	227	0	0	0	277	0	0	0	327	0	0	0	377	0	0	0
28	0	0	0	78	0	0	0	128	0	0	0	178	0	0	0	228	0	0	0	278	0	0	0	328	0	0	0	378	0	0	0
29	0	0	0	79	0	0	0	129	0	0	0	179	0	0	0	229	0	0	0	279	-1	0	1	329	0	0	0	379	0	0	0
30	0	0	0	80	1	0	-1	130	0	0	0	180	0	0	0	230	0	0	0	280	0	0	0	330	1	0	-1	380	0	0	0
31	0	0	0	81	0	0	0	131	0	0	0	181	0	0	0	231	0	0	0	281	0	0	0	331	-1	0	1	381	0	0	0
32	0	0	0	82	0	0	0	132	0	0	0	182	-1	0	1	232	0	0	0	282	0	0	0	332	0	0	0	382	0	0	0
33	0	0	0	83	0	0	0	133	0	0	0	183	0	0	0	233	0	0	0	283	-1	0	1	333	0	0	0	383	1	-1	-1
34	0	0	0	84	0	0	0	134	0	0	0	184	0	0	0	234	0	0	0	284	0	0	0	334	0	0	0	384	0	0	0
35	0	0	0	85	0	0	0	135	0	0	0	185	0	0	0	235	0	0	0	285	0	0	0	335	0	0	0	385	0	0	0
36	1	0	-1	86	0	0	0	136	0	0	0	186	0	0	0	236	0	0	0	286	0	0	0	336	0	0	0	386	1	-1	-1
37	-1	1	1	87	0	0	0	137	0	0	0	187	1	0	-1	237	0	0	0	287	0	0	0	337	0	0	0	387	0	0	0
38	-1	0	1	88	0	0	0	138	1	0	-1	188	0	0	0	238	0	0	0	288	0	0	0	338	0	0	0	388	0	0	0
39	1	0	-1	89	0	0	0	139	1	0	-1	189	0	0	0	239	0	0	0	289	0	0	0	339	0	0	0	389	0	0	0
40	0	0	0	90	-1	0	1	140	0	0	0	190	1	-1	-1	240	0	0	0	290	0	0	0	340	0	0	0	390	0	0	0
41	0	0	0	91	0	0	0	141	0	0	0	191	1	0	-1	241	0	0	0	291	0	0	0	341	0	0	0	391	0	0	0
42	0	0	0	92	0	0	0	142	0	0	0	192	-1	1	1	242	0	0	0	292	-1	0	1	342	0	0	0	392	0	0	0
43	0	0	0	93	0	0	0	143	0	0	0	193	0	0	0	243	0	0	0	293	0	0	0	343	0	0	0	393	0	0	0
44	0	0	0	94	0	0	0	144	0	0	0	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	0	0	0
45	0	0	0	95	0	0	0	145	0	0	0	195	0	0	0	245	0	0	0	295	0	0	0	345	0	0	0	395	0	0	0
46	0	0	0	96	0	0	0	146	0	0	0	196	0	0	0	246	0	0	0	296	0	0	0	346	0	0	0	396	1	0	-1
47	0	0	0	97	0	0	0	147	0	0	0	197	-1	0	1	247	0	0	0	297	0	0	0	347	0	0	0	397	0	0	0
48	0	0	0	98	0	0	0	148	1	0	-1	198	0	0	0	248	0	0	0	298	0	0	0	348	0	0	0	398	0	0	0
49	1	-1	-1	99	1	0	-1	149	0	0	0	199	0	0	0	249	0	0	0	299	1	-1	-1	349	1	0	-1	399	0	0	0
50	0	0	0	100	0	0	0	150	1	0	-1	200	0	0	0	250	0	0	0	300	0	0	0	350	0	0	0	400	0	0	0

70 = NUMBER OF ITEMS WEIGHTED

77 = NUMBER OF POSITIVE WEIGHTS
82 = NUMBER OF NEGATIVE WEIGHTS

For Conversion
Mean=25.36
S.D.=11.14

Item Weights for Entertainers on WIG-TOTAL Scales

```
         Weights
Item #   L  I  D
   1  1 -1 -1 *  51  0  0  0 * 101  0  0  0 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301 -1  0  1 * 351  0  0  0 *
   2  0  0  0 *  52  0  0  0 * 102  0  0  0 * 152  0  0  0 * 202  1 -1 -1 * 252  0  0  0 * 302  0  0  0 * 352  1 -1 -1 *
   3  0  0  0 *  53  0  0  0 * 103  1  0 -1 * 153  0  0  0 * 203  0  0  0 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
   4  0  0  0 *  54  0  0  0 * 104  0  0  0 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
   5  0  0  0 *  55  0  0  0 * 105  0  0  0 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
   6  0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
   7  1  0 -1 *  57  0  0  0 * 107  0  0  0 * 157  0  0  0 * 207  0  0  0 * 257  0  0  0 * 307  1  0 -1 * 357  0  0  0 *
   8  0  0  0 *  58 -1  0  1 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
   9  0  0  0 *  59  0  0  0 * 109  0  0  0 * 159  0  0  0 * 209 -1  0  1 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
  10  0  0  0 *  60  0  0  0 * 110  0  0  0 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310  1 -1 -1 * 360  0  0  0 *
  11  0  0  0 *  61  0  0  0 * 111  0  0  0 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311  0  0  0 * 361  0  0  0 *
  12  0  0  0 *  62  1  0 -1 * 112  0  0  0 * 162  1 -1 -1 * 212  0  0  0 * 262  0  0  0 * 312  1 -1 -1 * 362 -1  0  1 *
  13  0  0  0 *  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  1  0 -1 * 363 -1  0  1 *
  14 -1  0  1 *  64  0  0  0 * 114  1  0 -1 * 164 -1  0  1 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
  15  1  1 -1 *  65 -1  0  1 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315 -1  1  1 * 365  0  0  0 *
  16  0  0  0 *  66  0  0  0 * 116  0  0  0 * 166  0  0  0 * 216  0  0  0 * 266  0  0  0 * 316  0  0  0 * 366 -1  0  1 *
  17 -1  0  1 *  67  0  0  0 * 117  0  0  0 * 167  0  0  0 * 217  0  0  0 * 267  0  0  0 * 317  1  1 -1 * 367  0  0  0 *
  18  0  0  0 *  68  0  0  0 * 118  0  0  0 * 168  1 -1 -1 * 218  0  0  0 * 268  0  0  0 * 318  0  0  0 * 368  0  0  0 *
  19  0  0  0 *  69  1 -1 -1 * 119  1  0 -1 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  0  0  0 * 369  0  0  0 *
  20 -1  0  1 *  70  1 -1 -1 * 120  0  0  0 * 170  0  0  0 * 220  0  0  0 * 270  0  0  0 * 320  0  0  0 * 370 -1  0  1 *
  21  0  0  0 *  71  0  0  0 * 121 -1 -1  1 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  0  0  0 *
  22  0  0  0 *  72  0  0  0 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  0  0  0 * 322 -1  0  1 * 372  1 -1 -1 *
  23 -1 -1  1 *  73  0  0  0 * 123  0  0  0 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373 -1  1  1 *
  24  0  0  0 *  74  0  0  0 * 124 -1  0  1 * 174  0  0  0 * 224  0  0  0 * 274  0  0  0 * 324 -1  0  1 * 374 -1  0  1 *
  25 -1 -1  1 *  75  0  0  0 * 125  0  0  0 * 175  0  0  0 * 225  1 -1 -1 * 275  0  0  0 * 325  0  0  0 * 375  0  0  0 *
  26  0  0  0 *  76  1 -1 -1 * 126  0  0  0 * 176 -1  0  1 * 226  0  0  0 * 276 -1  0  1 * 326  0  0  0 * 376  0  0  0 *
  27  0  0  0 *  77  0  0  0 * 127  0  0  0 * 177  0  0  0 * 227  0  0  0 * 277  0  0  0 * 327  1 -1 -1 * 377  0  0  0 *
  28  1  0 -1 *  78  0  0  0 * 128 -1 -1  1 * 178  0  0  0 * 228  0  0  0 * 278  1  0 -1 * 328  0  0  0 * 378 -1  0  1 *
  29 -1  0  1 *  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279 -1  1  1 * 329  0  0  0 * 379  0  0  0 *
  30  0  0  0 *  80  1  0 -1 * 130  1  0 -1 * 180  0  0  0 * 230  0  0  0 * 280  0  0  0 * 330  0  0  0 * 380  0  0  0 *
  31 -1  0  1 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  1 -1 -1 * 281  0  0  0 * 331  0  0  0 * 381  0  0  0 *
  32  0  0  0 *  82  0  0  0 * 132  0  0  0 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382  1 -1 -1 *
  33  1 -1 -1 *  83  0  0  0 * 133  0  0  0 * 183 -1  1  1 * 233  0  0  0 * 283  1 -1 -1 * 333  0  0  0 * 383  0  0  0 *
  34  0  0  0 *  84  0  0  0 * 134  0  0  0 * 184  0  0  0 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384 -1  0  1 *
  35  0  0  0 *  85  0  0  0 * 135  0  0  0 * 185  0  0  0 * 235  0  0  0 * 285  0  0  0 * 335  1 -1 -1 * 385  0  0  0 *
  36  0  0  0 *  86  1  0 -1 * 136  0  0  0 * 186  0  0  0 * 236  1 -1 -1 * 286  0  0  0 * 336  0  0  0 * 386  0  0  0 *
  37  0  0  0 *  87  0  0  0 * 137  0  0  0 * 187  1  0 -1 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  0  0  0 *
  38  0  0  0 *  88  0  0  0 * 138  0  0  0 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388  0  0  0 *
  39  0  0  0 *  89  0  0  0 * 139 -1  0  1 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  1  0 -1 * 389  0  0  0 *
  40  0  0  0 *  90  0  0  0 * 140  0  0  0 * 190  0  0  0 * 240  0  0  0 * 290  0  0  0 * 340  0  0  0 * 390  0  0  0 *
  41  0  0  0 *  91  1  0 -1 * 141  1 -1 -1 * 191  0  0  0 * 241  0  0  0 * 291  0  0  0 * 341  1  0 -1 * 391  0  0  0 *
  42  0  0  0 *  92  0  0  0 * 142  0  0  0 * 192  0  0  0 * 242  0  0  0 * 292  1 -1 -1 * 342 -1  0  1 * 392  0  0  0 *
  43  0  0  0 *  93  1 -1 -1 * 143 -1  0  1 * 193  0  0  0 * 243  1 -1 -1 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
  44  0  0  0 *  94  0  0  0 * 144 -1 -1  1 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
  45  0  0  0 *  95  0  0  0 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  1  0 -1 * 345  0  0  0 * 395  0  0  0 *
  46  0  0  0 *  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396  0  0  0 *
  47  0  0  0 *  97  0  0  0 * 147  0  0  0 * 197  0  0  0 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
  48  0  0  0 *  98  0  0  0 * 148  0  0  0 * 198  0  0  0 * 248  0  0  0 * 298  0  0  0 * 348  0  0  0 * 398  0  0  0 *
  49  0  0  0 *  99  0  0  0 * 149  0  0  0 * 199  0  0  0 * 249  0  0  0 * 299  0  0  0 * 349  0  0  0 * 399  0  0  0 *
  50  0  0  0 * 100  0  0  0 * 150  0  0  0 * 200  1  0 -1 * 250  0  0  0 * 300  0  0  0 * 350  0  0  0 * 400  0  0  0 *

  77 = NUMBER OF ITEMS WEIGHTED

  83 = NUMBER OF POSITIVE WEIGHTS
 105 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion:
Mean=33.19
S.D.=15.17

Item Weights for Executive Housekeepers on WIG-TOTAL Scales

	Weights																														
Item #	L	I	D																												
1	0	0	0	51	-1	0	1	101	0	0	0	151	1	1	-1	201	0	0	0	251	0	0	0	301	0	0	0	351	1	0	-1
2	0	0	0	52	0	0	0	102	0	0	0	152	0	0	0	202	0	0	0	252	0	0	0	302	-1	0	1	352	1	-1	-1
3	0	0	0	53	0	0	0	103	0	0	0	153	1	-1	-1	203	0	0	0	253	0	0	0	303	-1	0	1	353	0	0	0
4	0	0	0	54	0	0	0	104	0	0	0	154	0	0	0	204	0	0	0	254	0	0	0	304	0	0	0	354	1	-1	-1
5	0	0	0	55	0	0	0	105	0	0	0	155	0	0	0	205	0	0	0	255	0	0	0	305	0	0	0	355	0	0	0
6	0	0	0	56	0	0	0	106	0	0	0	156	1	-1	-1	206	1	0	-1	256	0	0	0	306	0	0	0	356	0	0	0
7	0	0	0	57	0	0	0	107	0	0	0	157	0	0	0	207	0	0	0	257	0	0	0	307	-1	0	1	357	0	0	0
8	0	0	0	58	0	0	0	108	0	0	0	158	0	0	0	208	0	0	0	258	0	0	0	308	0	0	0	358	0	0	0
9	0	0	0	59	0	0	0	109	0	0	0	159	0	0	0	209	1	0	-1	259	0	0	0	309	0	0	0	359	0	0	0
10	0	0	0	60	0	0	0	110	0	0	0	160	0	0	0	210	0	0	0	260	0	0	0	310	0	0	0	360	0	0	0
11	0	0	0	61	0	0	0	111	0	0	0	161	0	0	0	211	0	0	0	261	0	0	0	311	-1	0	1	361	0	0	0
12	0	0	0	62	0	0	0	112	0	0	0	162	0	0	0	212	0	0	0	262	0	0	0	312	-1	0	1	362	0	0	0
13	1	0	-1	63	0	0	0	113	0	0	0	163	0	0	0	213	0	0	0	263	0	0	0	313	0	0	0	363	1	0	-1
14	0	0	0	64	0	0	0	114	0	0	0	164	0	0	0	214	0	0	0	264	0	0	0	314	0	0	0	364	0	0	0
15	0	0	0	65	1	0	-1	115	1	-1	-1	165	-1	0	1	215	0	0	0	265	0	0	0	315	0	0	0	365	0	0	0
16	0	0	0	66	0	0	0	116	0	0	0	166	0	0	0	216	0	0	0	266	0	0	0	316	0	0	0	366	1	0	-1
17	1	0	-1	67	0	0	0	117	-1	0	1	167	1	0	-1	217	0	0	0	267	1	0	-1	317	0	0	0	367	0	0	0
18	1	0	-1	68	0	0	0	118	0	0	0	168	0	0	0	218	0	0	0	268	0	0	0	318	0	0	0	368	0	0	0
19	-1	1	1	69	0	0	0	119	0	0	0	169	0	0	0	219	0	0	0	269	0	0	0	319	0	0	0	369	0	0	0
20	0	0	0	70	0	0	0	120	1	0	-1	170	0	0	0	220	0	0	0	270	0	0	0	320	0	0	0	370	0	0	0
21	0	0	0	71	0	0	0	121	1	0	-1	171	0	0	0	221	0	0	0	271	0	0	0	321	0	0	0	371	1	-1	-1
22	0	0	0	72	1	0	-1	122	0	0	0	172	0	0	0	222	0	0	0	272	1	1	-1	322	0	0	0	372	0	0	0
23	0	0	0	73	0	0	0	123	1	0	-1	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	0	0	0
24	-1	1	1	74	1	1	-1	124	0	0	0	174	1	0	-1	224	0	0	0	274	-1	0	1	324	0	0	0	374	1	0	-1
25	0	0	0	75	1	0	-1	125	0	0	0	175	0	0	0	225	-1	0	1	275	0	0	0	325	0	0	0	375	0	0	0
26	0	0	0	76	0	0	0	126	0	0	0	176	1	0	-1	226	1	-1	-1	276	0	0	0	326	0	0	0	376	0	0	0
27	0	0	0	77	0	0	0	127	0	0	0	177	0	0	0	227	1	0	-1	277	0	0	0	327	0	0	0	377	0	0	0
28	0	0	0	78	0	0	0	128	1	0	-1	178	1	-1	-1	228	0	0	0	278	0	0	0	328	0	0	0	378	0	0	0
29	0	0	0	79	0	0	0	129	0	0	0	179	0	0	0	229	-1	0	1	279	1	0	-1	329	0	0	0	379	0	0	0
30	0	0	0	80	0	0	0	130	0	0	0	180	0	0	0	230	0	0	0	280	0	0	0	330	0	0	0	380	0	0	0
31	1	0	-1	81	0	0	0	131	0	0	0	181	1	-1	-1	231	0	0	0	281	0	0	0	331	-1	-1	1	381	0	0	0
32	0	0	0	82	0	0	0	132	0	0	0	182	1	0	-1	232	0	0	0	282	0	0	0	332	-1	-1	1	382	0	0	0
33	0	0	0	83	0	0	0	133	0	0	0	183	1	0	-1	233	0	0	0	283	0	0	0	333	0	0	0	383	0	0	0
34	1	0	-1	84	0	0	0	134	0	0	0	184	0	0	0	234	0	0	0	284	0	0	0	334	0	0	0	384	0	0	0
35	0	0	0	85	0	0	0	135	0	0	0	185	0	0	0	235	0	0	0	285	0	0	0	335	0	0	0	385	0	0	0
36	0	0	0	86	-1	0	1	136	0	0	0	186	0	0	0	236	0	0	0	286	-1	0	1	336	0	0	0	386	0	0	0
37	1	-1	-1	87	0	0	0	137	0	0	0	187	0	0	0	237	0	0	0	287	0	0	0	337	1	-1	-1	387	1	0	-1
38	0	0	0	88	0	0	0	138	0	0	0	188	0	0	0	238	0	0	0	288	0	0	0	338	1	0	-1	388	0	0	0
39	0	0	0	89	1	1	-1	139	0	0	0	189	0	0	0	239	0	0	0	289	0	0	0	339	0	0	0	389	0	0	0
40	0	0	0	90	0	0	0	140	0	0	0	190	0	0	0	240	0	0	0	290	0	0	0	340	0	0	0	390	0	0	0
41	1	-1	-1	91	0	0	0	141	0	0	0	191	0	0	0	241	0	0	0	291	0	0	0	341	-1	0	1	391	0	0	0
42	-1	0	1	92	0	0	0	142	0	0	0	192	1	1	-1	242	0	0	0	292	0	0	0	342	0	0	0	392	-1	1	1
43	1	0	-1	93	0	0	0	143	0	0	0	193	0	0	0	243	0	0	0	293	0	0	0	343	0	0	0	393	0	0	0
44	1	0	-1	94	0	0	0	144	1	0	-1	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	0	0	0
45	0	0	0	95	1	0	-1	145	0	0	0	195	1	0	-1	245	0	0	0	295	0	0	0	345	0	0	0	395	0	0	0
46	1	-1	-1	96	0	0	0	146	0	0	0	196	0	0	0	246	0	0	0	296	0	0	0	346	1	-1	-1	396	0	0	0
47	1	-1	-1	97	0	0	0	147	0	0	0	197	0	0	0	247	0	0	0	297	0	0	0	347	1	-1	-1	397	1	-1	-1
48	1	-1	-1	98	0	0	0	148	0	0	0	198	0	0	0	248	1	-1	-1	298	0	0	0	348	0	0	0	398	1	0	-1
49	0	0	0	99	0	0	0	149	1	-1	-1	199	0	0	0	249	0	0	0	299	-1	0	1	349	0	0	0	399	0	0	0
50	1	-1	-1	100	0	0	0	150	0	0	0	200	0	0	0	250	1	0	-1	300	0	0	0	350	0	0	0	400	0	0	0

82 = NUMBER OF ITEMS WEIGHTED

90 = NUMBER OF POSITIVE WEIGHTS
105 = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean=27.58
S.D.=16.21

Item Weights for Executive Housekeepers on WIS-NP Scales

Item #	Weights L	I	D	*	51			*	101	0	0	0	*	151	1	0	-1	*	201	0	0	0	*	251	0	0	0	*	301	0	0	0	*	351	0	0	*
2	0	0	0	*	52	0	0	0	*	102	0	0	0	*	152	0	0	0	*	202	0	0	0	*	252	0	0	0	*	302	0	0	0	*	352	0	-1	*
3	0	0	0	*	53	0	0	0	*	103	0	0	0	*	153	1	0	-1	*	203	0	0	0	*	253	0	0	0	*	303	-1	0	1	*	353	0	0	*
4	0	0	0	*	54	0	0	0	*	104	0	0	0	*	154	0	0	0	*	204	0	0	0	*	254	0	0	0	*	304	1	-1	-1	*	354	1	-1	*
5	0	0	0	*	55	0	0	0	*	105	-1	0	1	*	155	0	0	0	*	205	0	0	0	*	255	0	0	0	*	305	0	0	0	*	355	0	0	*
6	0	0	0	*	56	0	0	0	*	106	0	0	0	*	156	0	0	0	*	206	0	0	0	*	256	0	0	0	*	306	0	0	0	*	356	0	0	*
7	0	0	0	*	57	-1	0	1	*	107	0	0	0	*	157	0	0	0	*	207	0	0	0	*	257	0	0	0	*	307	-1	0	1	*	357	0	0	*
8	0	0	0	*	58	0	0	0	*	108	0	0	0	*	158	0	0	0	*	208	0	0	0	*	258	0	0	0	*	308	0	0	0	*	358	-1	0	*
9	0	0	0	*	59	0	0	0	*	109	0	0	0	*	159	0	0	0	*	209	0	0	0	*	259	0	0	0	*	309	0	0	0	*	359	0	0	*
10	0	0	0	*	60	0	0	0	*	110	0	0	0	*	160	0	0	0	*	210	0	0	0	*	260	0	0	0	*	310	0	0	0	*	360	0	0	*
11	0	0	0	*	61	0	0	0	*	111	0	0	0	*	161	0	0	0	*	211	0	0	0	*	261	0	0	0	*	311	0	0	0	*	361	0	0	*
12	0	0	0	*	62	0	0	1	*	112	0	0	0	*	162	0	0	0	*	212	1	-1	-1	*	262	0	0	0	*	312	0	0	0	*	362	0	0	*
13	0	-1	0	*	63	0	0	0	*	113	0	0	0	*	163	0	0	0	*	213	0	0	0	*	263	0	0	0	*	313	0	0	0	*	363	0	0	*
14	0	0	0	*	64	0	0	0	*	114	0	0	0	*	164	0	0	0	*	214	0	0	0	*	264	0	0	0	*	314	0	0	0	*	364	0	0	*
15	0	0	0	*	65	0	0	0	*	115	1	0	-1	*	165	0	0	0	*	215	0	0	0	*	265	0	0	0	*	315	0	0	0	*	365	0	0	*
16	0	0	0	*	66	-1	0	1	*	116	0	0	0	*	166	0	0	0	*	216	0	0	0	*	266	-1	1	1	*	316	0	0	0	*	366	0	0	*
17	0	0	0	*	67	0	0	0	*	117	0	0	0	*	167	1	0	-1	*	217	0	0	0	*	267	0	0	0	*	317	0	0	0	*	367	0	0	*
18	0	0	0	*	68	0	0	0	*	118	0	0	0	*	168	-1	0	1	*	218	0	0	0	*	268	0	0	0	*	318	0	0	0	*	368	0	0	*
19	0	0	0	*	69	0	0	0	*	119	0	0	0	*	169	0	0	0	*	219	0	0	0	*	269	0	0	0	*	319	0	0	0	*	369	0	0	*
20	0	0	0	*	70	0	0	0	*	120	1	0	-1	*	170	0	0	0	*	220	0	0	0	*	270	0	0	0	*	320	0	0	0	*	370	0	0	*
21	0	0	0	*	71	0	0	0	*	121	0	0	0	*	171	0	0	0	*	221	0	0	0	*	271	0	0	0	*	321	0	0	0	*	371	0	0	*
22	0	0	0	*	72	0	0	0	*	122	0	0	0	*	172	0	0	0	*	222	0	0	0	*	272	0	0	0	*	322	0	0	0	*	372	0	0	*
23	0	0	0	*	73	0	0	0	*	123	0	0	0	*	173	0	0	0	*	223	0	0	0	*	273	0	0	0	*	323	0	0	0	*	373	0	0	*
24	0	0	0	*	74	0	0	0	*	124	0	0	0	*	174	0	0	0	*	224	0	0	0	*	274	0	0	0	*	324	0	0	0	*	374	0	0	*
25	0	0	0	*	75	0	0	0	*	125	0	0	0	*	175	0	0	0	*	225	0	0	0	*	275	0	0	0	*	325	0	0	0	*	375	0	0	*
26	0	0	0	*	76	0	0	0	*	126	0	0	0	*	176	0	0	0	*	226	0	0	0	*	276	0	0	0	*	326	0	0	0	*	376	0	0	*
27	0	0	0	*	77	0	0	0	*	127	-1	0	1	*	177	0	0	0	*	227	0	0	0	*	277	0	0	0	*	327	0	0	0	*	377	0	0	*
28	0	0	0	*	78	0	0	0	*	128	0	0	0	*	178	0	0	0	*	228	0	0	0	*	278	0	0	0	*	328	0	0	0	*	378	0	0	*
29	0	0	0	*	79	0	0	0	*	129	0	0	0	*	179	0	0	0	*	229	0	0	0	*	279	0	0	0	*	329	0	0	0	*	379	0	0	*
30	0	0	0	*	80	0	0	0	*	130	0	0	0	*	180	0	0	0	*	230	0	0	0	*	280	0	0	0	*	330	0	0	0	*	380	0	0	*
31	0	0	0	*	81	0	0	0	*	131	0	0	0	*	181	1	0	-1	*	231	0	0	0	*	281	0	0	0	*	331	-1	-1	1	*	381	0	0	*
32	0	0	0	*	82	-1	0	1	*	132	0	0	0	*	182	1	0	-1	*	232	0	0	0	*	282	0	0	0	*	332	0	0	0	*	382	0	0	*
33	0	0	0	*	83	0	0	0	*	133	0	0	0	*	183	0	0	0	*	233	0	0	0	*	283	0	0	0	*	333	0	0	0	*	383	0	0	*
34	0	0	0	*	84	0	0	0	*	134	0	0	0	*	184	0	0	0	*	234	0	0	0	*	284	0	0	0	*	334	1	0	-1	*	384	0	0	*
35	0	0	0	*	85	0	0	0	*	135	0	0	0	*	185	0	0	0	*	235	0	0	0	*	285	0	0	0	*	335	0	0	0	*	385	0	0	*
36	0	0	0	*	86	-1	0	1	*	136	0	0	0	*	186	0	0	0	*	236	0	0	0	*	286	0	0	0	*	336	0	0	0	*	386	0	0	*
37	1	0	-1	*	87	0	0	0	*	137	0	0	0	*	187	0	0	0	*	237	0	0	0	*	287	0	0	0	*	337	1	-1	-1	*	387	0	0	*
38	0	0	0	*	88	0	0	0	*	138	0	0	0	*	188	0	0	0	*	238	1	-1	-1	*	288	0	0	0	*	338	1	0	-1	*	388	0	0	*
39	0	0	0	*	89	0	0	0	*	139	0	0	0	*	189	0	0	0	*	239	0	0	0	*	289	0	0	0	*	339	0	0	0	*	389	0	0	*
40	0	0	0	*	90	0	0	0	*	140	0	0	0	*	190	0	0	0	*	240	0	0	0	*	290	0	0	0	*	340	0	0	0	*	390	0	0	*
41	0	0	0	*	91	0	0	0	*	141	0	0	0	*	191	1	-1	-1	*	241	0	0	0	*	291	0	0	0	*	341	0	0	0	*	391	0	0	*
42	0	0	0	*	92	0	0	0	*	142	0	0	0	*	192	0	0	0	*	242	0	0	0	*	292	-1	1	1	*	342	0	0	0	*	392	0	0	*
43	0	0	0	*	93	0	0	0	*	143	0	0	0	*	193	0	0	0	*	243	0	0	0	*	293	0	0	0	*	343	0	0	0	*	393	0	0	*
44	0	0	0	*	94	0	0	0	*	144	0	0	0	*	194	0	0	0	*	244	0	0	0	*	294	0	0	0	*	344	0	0	0	*	394	1	-1	*
45	0	0	0	*	95	0	0	0	*	145	0	0	0	*	195	1	-1	-1	*	245	0	0	0	*	295	0	0	0	*	345	-1	1	1	*	395	0	0	*
46	0	0	0	*	96	0	0	0	*	146	0	0	0	*	196	1	-1	-1	*	246	0	0	0	*	296	0	0	0	*	346	1	-1	-1	*	396	0	0	*
47	1	-1	-1	*	97	0	0	0	*	147	0	0	0	*	197	0	0	0	*	247	0	0	0	*	297	0	0	0	*	347	1	-1	-1	*	397	0	0	*
48	1	-1	-1	*	98	0	0	0	*	148	0	0	0	*	198	1	-1	-1	*	248	0	0	0	*	298	0	0	0	*	348	0	0	0	*	398	0	0	*
49	1	0	0	*	99	0	0	0	*	149	0	0	0	*	199	0	0	0	*	249	0	0	0	*	299	0	0	0	*	349	0	0	0	*	399	0	0	*
50	1	-1	-1	*	100	0	0	0	*	150	1	0	-1	*	200	-1	0	1	*	250	0	0	0	*	300	0	0	0	*	350	0	0	0	*	400	0	0	*

47 = NUMBER OF ITEMS WEIGHTED

26 = NUMBER OF POSITIVE WEIGHTS
65 = NUMBER OF NEGATIVE WEIGHTS

For Conversion
Mean=16.75
S.D.= 8.88

Item Weights for Instrument Assemblers on WIG-TOTAL Scales

Item #	Weights L	I	D
1	-1	0	1
2	0	0	0
3	0	0	0
4	0	0	0
5	-1	0	1
6	0	0	0
7	0	0	0
8	0	0	0
9	-1	1	1
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	1	1	-1
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	-1	0	1
25	1	-1	-1
26	0	0	0
27	0	0	0
28	0	0	0
29	-1	0	1
30	0	0	0
31	0	0	0
32	0	0	0
33	-1	0	1
34	0	0	0
35	-1	0	1
36	-1	1	1
37	0	0	0
38	1	1	-1
39	0	0	0
40	0	0	0
41	1	-1	-1
42	-1	0	1
43	1	1	-1
44	1	0	-1
45	0	0	0
46	0	0	0
47	0	0	0
48	0	0	0
49	0	0	0

46 = NUMBER OF ITEMS DELETE

144 = NUMBER OF ITEMS RETAINED
93 = NUMBER OF ITEMS

For Conversion:
Mean=25.97
S.D.=17.64

Item Weights for Instrument Assemblers on WIG-NP Scales

```
       Weights
Item # L  I  D
   1   0  0  0 *  51  0  0  0 * 101  0  0  0 * 151  1  0 -1 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
   2  -1  0  1 *  52  0  0  0 * 102  0  0  0 * 152 -1  0  1 * 202  0  0  0 * 252 -1  1  1 * 302  0  0  0 * 352 -1  1  1 *
   3   0  0  0 *  53  0  0  0 * 103  0  0  0 * 153  0  0  0 * 203 -1  0  1 * 253  0  0  0 * 303  0  0  0 * 353  1  0 -1 *
   4  -1  0  1 *  54  0  0  0 * 104  0  0  0 * 154  0  0  0 * 204  1  0 -1 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
   5   0  0  0 *  55  0  0  0 * 105  0  0  0 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
   6   0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256 -1  1  1 * 306  1  1 -1 * 356  0  0  0 *
   7   0  0  0 *  57  0  0  0 * 107  0  0  0 * 157 -1  0  1 * 207  0  0  0 * 257  0  0  0 * 307  1  0 -1 * 357  0  0  0 *
   8   0  0  0 *  58  0  0  0 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
   9   0  0  0 *  59  0  0  0 * 109  0  0  0 * 159  0  0  0 * 209  1 -1 -1 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
  10   0  0  0 *  60  0  0  0 * 110  0  0  0 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310  0  0  0 * 360  0  0  0 *
  11   0  0  0 *  61  0  0  0 * 111 -1  0  1 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311  0  0  0 * 361  1  1 -1 *
  12  -1  0  1 *  62  0  0  0 * 112  0  0  0 * 162  0  0  0 * 212 -1  1  1 * 262  0  0  0 * 312  0  0  0 * 362  0  0  0 *
  13  -1  0  1 *  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  0  0  0 *
  14   0  0  0 *  64  0  0  0 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
  15   0  0  0 *  65 -1  1  1 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  0  0  0 * 365  0  0  0 *
  16   0  0  0 *  66  0  0  0 * 116  0  0  0 * 166  0  0  0 * 216  0  0  0 * 266  1 -1 -1 * 316  0  0  0 * 366  0  0  0 *
  17   0  0  0 *  67 -1  0  1 * 117  0  0  0 * 167  0  0  0 * 217  0  0  0 * 267  1 -1 -1 * 317  0  0  0 * 367  0  0  0 *
  18   0  0  0 *  68  0  0  0 * 118  0  0  0 * 168  1  1 -1 * 218  0  0  0 * 268 -1  0  1 * 318  0  0  0 * 368  0  0  0 *
  19   0  0  0 *  69  0  0  0 * 119  0  0  0 * 169 -1  1  1 * 219  0  0  0 * 269  0  0  0 * 319  0  0  0 * 369 -1  1  1 *
  20   0  0  0 *  70  0  0  0 * 120  0  0  0 * 170 -1  0  1 * 220  0  0  0 * 270  0  0  0 * 320  0  0  0 * 370  0  0  0 *
  21   0  0  0 *  71  0  0  0 * 121  0  0  0 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  0  0  0 *
  22   0  0  0 *  72 -1  0  1 * 122  0  0  0 * 172 -1  1  1 * 222  0  0  0 * 272  0  0  0 * 322  0  0  0 * 372 -1  1  1 *
  23   0  0  0 *  73  0  0  0 * 123  0  0  0 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  0  0  0 *
  24  -1  0  1 *  74  0  0  0 * 124  0  0  0 * 174 -1  1  1 * 224  0  0  0 * 274  0  0  0 * 324  0  0  0 * 374  0  0  0 *
  25   1 -1 -1 *  75  0  0  0 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375 -1  0  1 *
  26   0  0  0 *  76  0  0  0 * 126  0  0  0 * 176  1  0 -1 * 226  0  0  0 * 276  0  0  0 * 326  0  0  0 * 376  0  0  0 *
  27   0  0  0 *  77 -1  0  1 * 127  0  0  0 * 177  1  0 -1 * 227  0  0  0 * 277  0  0  0 * 327  0  0  0 * 377  0  0  0 *
  28   0  0  0 *  78 -1  0  1 * 128  0  0  0 * 178  0  0  0 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378  0  0  0 *
  29  -1  0  1 *  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279  0  0  0 * 329  0  0  0 * 379 -1  1  1 *
  30  -1 -1  1 *  80  0  0  0 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280  0  0  0 * 330 -1  0  1 * 380  0  0  0 *
  31   0  0  0 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331  0  0  0 * 381  0  0  0 *
  32   0  0  0 *  82  0  0  0 * 132 -1  0  1 * 182  0  0  0 * 232 -1  1  1 * 282  0  0  0 * 332  0  0  0 * 382 -1  0  1 *
  33  -1  0  1 *  83  0  0  0 * 133  0  0  0 * 183  0  0  0 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383 -1  0  1 *
  34   0  0  0 *  84  0  0  0 * 134 -1  1  1 * 184 -1  0  1 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384  0  0  0 *
  35   0  0  0 *  85  0  0  0 * 135  0  0  0 * 185  0  0  0 * 235  0  0  0 * 285  0  0  0 * 335  0  0  0 * 385  0  0  0 *
  36  -1  0  1 *  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286 -1  0  1 * 336  0  0  0 * 386  0  0  0 *
  37   0  0  0 *  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  0  0  0 *
  38   1  0 -1 *  88  0  0  0 * 138  0  0  0 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388  0  0  0 *
  39   0  0  0 *  89  0  0  0 * 139  0  0  0 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
  40  -1  0  1 *  90  0  0  0 * 140  1  0 -1 * 190  0  0  0 * 240  0  0  0 * 290  0  0  0 * 340  1  0 -1 * 390  0  0  0 *
  41   0  0  0 *  91  0  0  0 * 141  0  0  0 * 191 -1  0  1 * 241  0  0  0 * 291  0  0  0 * 341  0  0  0 * 391  0  0  0 *
  42   0  0  0 *  92  0  0  0 * 142  0  0  0 * 192  0  0  0 * 242  0  0  0 * 292  1  0 -1 * 342  0  0  0 * 392 -1  0  1 *
  43   0  0  0 *  93  0  0  0 * 143  0  0  0 * 193  0  0  0 * 243  0  0  0 * 293  0  0  0 * 343 -1 -1  1 * 393  0  0  0 *
  44   0  0  0 *  94  0  0  0 * 144 -1  0  1 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
  45   0  0  0 *  95  0  0  0 * 145 -1  0  1 * 195 -1  0  1 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
  46   0  0  0 *  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396 -1  1  1 *
  47   0  0  0 *  97  0  0  0 * 147  0  0  0 * 197 -1  1  1 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
  48   0  0  0 *  98  0  0  0 * 148  0  0  0 * 198  0  0  0 * 248  0  0  0 * 298  0  0  0 * 348  0  0  0 * 398  0  0  0 *
  49   0  0  0 *  99  0  0  0 * 149  0  0  0 * 199  0  0  0 * 249  0  0  0 * 299  0  0  0 * 349 -1  0  1 * 399  0  0  0 *
  50   0  0  0 * 100  0  0  0 * 150 -1  0  1 * 200  0  0  0 * 250  0  0  0 * 300  0  0  0 * 350  0  0  0 * 400  0  0  0 *

 67 = NUMBER OF ITEMS WEIGHTED

 85 = NUMBER OF POSITIVE WEIGHTS
 73 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion
Mean=15.78
S.D.=14.29

Item Weights for Interior Decorators on WIG-TOTAL Scales

	Weights																														
Item #	L	I	D																												
1	0	0	0	51	0	0	0	101	0	0	0	151	0	0	0	201	0	0	0	251	0	0	0	301	0	0	0	351	1	0	-1
2	-1	-1	1	52	0	0	0	102	0	0	0	152	0	0	0	202	0	0	0	252	0	0	0	302	0	0	0	352	1	-1	-1
3	-1	0	1	53	0	0	0	103	1	0	-1	153	0	0	0	203	-1	0	1	253	0	0	0	303	0	0	0	353	0	0	0
4	0	0	0	54	-1	0	1	104	0	0	0	154	0	0	0	204	0	0	0	254	0	0	0	304	0	0	0	354	0	0	0
5	1	-1	-1	55	1	0	-1	105	-1	0	1	155	1	0	-1	205	0	0	0	255	0	0	0	305	0	0	0	355	0	0	0
6	1	-1	-1	56	0	0	0	106	-1	0	1	156	0	0	0	206	0	0	0	256	0	0	0	306	0	0	0	356	0	0	0
7	0	0	0	57	0	0	0	107	0	0	0	157	0	0	0	207	1	-1	-1	257	-1	1	1	307	0	0	0	357	0	0	0
8	-1	0	1	58	0	0	0	108	0	0	0	158	1	-1	-1	208	0	0	0	258	0	0	0	308	0	0	0	358	0	0	0
9	0	0	0	59	0	0	0	109	0	0	0	159	0	0	0	209	-1	1	1	259	0	0	0	309	0	0	0	359	0	0	0
10	0	0	0	60	0	0	0	110	-1	0	1	160	0	0	0	210	0	0	0	260	1	-1	-1	310	0	0	0	360	0	0	0
11	0	0	0	61	0	0	0	111	0	0	0	161	0	0	0	211	0	0	0	261	0	0	0	311	1	-1	-1	361	0	0	0
12	0	0	0	62	0	0	0	112	1	0	-1	162	1	-1	-1	212	0	0	0	262	0	0	0	312	0	0	0	362	0	0	0
13	-1	0	1	63	0	0	0	113	0	0	0	163	0	0	0	213	0	0	0	263	0	0	0	313	1	0	-1	363	0	0	0
14	-1	0	1	64	0	0	0	114	0	0	0	164	-1	0	1	214	1	0	-1	264	0	0	0	314	0	0	0	364	1	-1	-1
15	-1	0	1	65	0	0	0	115	0	0	0	165	0	0	0	215	0	0	0	265	0	0	0	315	0	0	0	365	0	0	0
16	-1	0	1	66	0	0	0	116	-1	0	1	166	0	0	0	216	0	0	0	266	0	0	0	316	0	0	0	366	0	0	0
17	-1	0	1	67	-1	0	1	117	-1	0	1	167	0	0	0	217	0	0	0	267	0	0	0	317	0	0	0	367	0	0	0
18	1	-1	-1	68	1	-1	-1	118	0	0	0	168	0	0	0	218	0	0	0	268	0	0	0	318	0	0	0	368	0	0	0
19	0	0	0	69	0	0	0	119	0	0	0	169	0	0	0	219	0	0	0	269	0	0	0	319	0	0	0	369	0	0	0
20	-1	0	1	70	0	0	0	120	0	0	0	170	0	0	0	220	0	0	0	270	1	-1	-1	320	-1	0	1	370	0	0	0
21	0	0	0	71	0	0	0	121	-1	-1	1	171	0	0	0	221	0	0	0	271	0	0	0	321	0	0	0	371	0	0	0
22	-1	0	1	72	-1	0	1	122	0	0	0	172	0	0	0	222	0	0	0	272	0	0	0	322	0	0	0	372	0	0	0
23	-1	-1	1	73	-1	-1	1	123	0	0	0	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	-1	1	1
24	0	0	0	74	-1	-1	1	124	0	0	0	174	0	0	0	224	0	0	0	274	1	0	-1	324	-1	0	1	374	0	0	0
25	-1	-1	1	75	0	0	0	125	0	0	0	175	0	0	0	225	0	0	0	275	0	0	0	325	0	0	0	375	0	0	0
26	0	0	0	76	1	1	-1	126	0	0	0	176	0	0	0	226	0	0	0	276	0	0	0	326	1	-1	-1	376	0	0	0
27	0	0	0	77	-1	0	1	127	-1	0	1	177	0	0	0	227	0	0	0	277	0	0	0	327	0	0	0	377	0	0	0
28	1	-1	-1	78	0	0	0	128	-1	-1	1	178	-1	0	1	228	0	0	0	278	0	0	0	328	-1	0	1	378	0	0	0
29	0	0	0	79	-1	0	1	129	0	0	0	179	1	-1	-1	229	0	0	0	279	0	0	0	329	0	0	0	379	0	0	0
30	-1	-1	1	80	0	0	0	130	0	0	0	180	0	0	0	230	1	-1	-1	280	-1	0	1	330	0	0	0	380	0	0	0
31	0	0	0	81	0	0	0	131	0	0	0	181	0	0	0	231	1	-1	-1	281	0	0	0	331	0	0	0	381	0	0	0
32	1	0	-1	82	0	0	0	132	-1	0	1	182	1	-1	-1	232	0	0	0	282	0	0	0	332	0	0	0	382	0	0	0
33	0	0	0	83	-1	0	1	133	0	0	0	183	0	0	0	233	0	0	0	283	0	0	0	333	0	0	0	383	0	0	0
34	0	0	0	84	-1	-1	1	134	0	0	0	184	0	0	0	234	0	0	0	284	1	-1	-1	334	0	0	0	384	1	0	-1
35	0	0	0	85	0	0	0	135	0	0	0	185	0	0	0	235	0	0	0	285	0	0	0	335	1	-1	-1	385	0	0	0
36	0	0	0	86	0	0	0	136	0	0	0	186	0	0	0	236	0	0	0	286	0	0	0	336	0	0	0	386	0	0	0
37	0	0	0	87	0	0	0	137	1	-1	-1	187	0	0	0	237	0	0	0	287	0	0	0	337	0	0	0	387	0	0	0
38	0	0	0	88	0	0	0	138	0	0	0	188	0	0	0	238	0	0	0	288	-1	0	1	338	0	0	0	388	0	0	0
39	0	0	0	89	0	0	0	139	0	0	0	189	0	0	0	239	0	0	0	289	0	0	0	339	0	0	0	389	-1	1	1
40	0	0	0	90	0	0	0	140	0	0	0	190	-1	1	1	240	0	0	0	290	0	0	0	340	0	0	0	390	0	0	0
41	0	0	0	91	0	0	0	141	0	0	0	191	0	0	0	241	0	0	0	291	0	0	0	341	0	0	0	391	0	0	0
42	0	0	0	92	0	0	0	142	-1	0	1	192	-1	0	1	242	0	0	0	292	0	0	0	342	0	0	0	392	0	0	0
43	-1	-1	1	93	0	0	0	143	-1	0	1	193	0	0	0	243	0	0	0	293	0	0	0	343	0	0	0	393	0	0	0
44	-1	-1	1	94	0	0	0	144	0	0	0	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	0	0	0
45	0	0	0	95	0	0	0	145	0	0	0	195	0	0	0	245	0	0	0	295	0	0	0	345	0	0	0	395	0	0	0
46	0	0	0	96	0	0	0	146	0	0	0	196	0	0	0	246	0	0	0	296	-1	0	1	346	0	0	0	396	0	0	0
47	0	0	0	97	0	0	0	147	0	0	0	197	0	0	0	247	0	0	0	297	0	0	0	347	0	0	0	397	0	0	0
48	0	0	0	98	1	-1	-1	148	1	-1	-1	198	0	0	0	248	0	0	0	298	0	0	0	348	0	0	0	398	0	0	0
49	1	-1	-1	99	0	0	0	149	0	0	0	199	0	0	0	249	0	0	0	299	-1	1	1	349	0	0	0	399	0	0	0
50	1	-1	-1	100	0	0	0	150	0	0	0	200	0	0	0	250	0	0	0	300	-1	-1	1	350	1	-1	-1	400	0	0	0

89 = NUMBER OF ITEMS WEIGHTED

96 = NUMBER OF POSITIVE WEIGHTS
127 = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean=48.44
S.D.=14.23

Item Weights for Licensed Practical Nurses on WIC-TOTAL Scales

Item #	Weights L	I	D
1	-1	0	1
2	1	0	-1
3	0	0	0
4	0	0	0
5	-1	0	1
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	1	0	-1
14	0	0	0
15	0	0	0
16	1	0	-1
17	1	0	-1
18	0	0	0
19	-1	0	1
20	0	0	0
21	0	0	0
22	1	0	-1
23	1	0	-1
24	-1	0	1
25	0	0	0
26	0	0	0
27	0	0	0
28	0	0	0
29	0	0	0
30	1	1	-1
31	1	0	-1
32	0	0	0
33	-1	0	1
34	0	0	0
35	-1	1	1
36	0	0	0
37	0	0	0
38	0	0	0
39	1	0	-1
40	0	0	0
41	0	0	0
42	-1	1	1
43	1	1	-1
44	0	1	-1
45	0	0	0
46	0	0	0
47	0	0	0
48	1	0	-1
49	-1	0	1
50	0	0	0

46 = NUMBER OF ITEMS WEIGHTED

109 = NUMBER OF POSITIVE WEIGHTS
137 = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean=33.25
S.D.=18.27

Item Weights for Licensed Practical Nurses on WIG-WP Scales 968

Item #	L	I	D		Weight				Item #	L	I	D		Weight				Item #	L	I	D		Weight				Item #	L	I	D		Weight			
1	0	0		*	51	1	0	0	*	101	0	0	0	*	151	1	1	-1	*	201	0	0	0	*	251	0	0	0	*	301	1	1	0	*	351	0	0	0	*
2	1	0	-1	*	52	0	0	0	*	102	1	0	-1	*	152	1	0	-1	*	202	0	0	0	*	252	0	0	0	*	302	1	1	0	*	352	0	0	0	*
3	0	0		*	53	0	0	0	*	103	0	0	0	*	153	1	-1	-1	*	203	1	0	-1	*	253	0	0	0	*	303	1	0	0	*	353	0	0	0	*
4	-1	0	1	*	54	1	0	-1	*	104	0	0	0	*	154	0	0	0	*	204	0	0	0	*	254	0	0	0	*	304	1	0	0	*	354	0	0	0	*
5	0	0		*	55	0	0	0	*	105	-1	0	1	*	155	0	0	0	*	205	0	0	1	*	255	0	0	0	*	305	1	0	0	*	355	0	0	0	*
6	0	0		*	56	0	0	0	*	106	1	0	-1	*	156	0	0	0	*	206	0	0	1	*	256	0	0	0	*	306	1	0	0	*	356	0	0	0	*
7	0	0		*	57	-1	0	1	*	107	0	0	0	*	157	1	0	-1	*	207	-1	1	1	*	257	0	0	0	*	307	-1	0	1	*	357	0	0	0	*
8	0	0		*	58	0	0	0	*	108	0	0	0	*	158	0	0	0	*	208	0	0	1	*	258	0	0	0	*	308	1	0	0	*	358	0	0	0	*
9	0	0		*	59	0	0	0	*	109	0	0	0	*	159	1	1	-1	*	209	1	0	-1	*	259	0	0	0	*	309	1	0	0	*	359	0	0	0	*
10	0	0		*	60	0	0	0	*	110	0	0	0	*	160	0	0	0	*	210	-1	0	1	*	260	0	0	0	*	310	0	0	0	*	360	0	0	0	*
11	0	0		*	61	-1	0	1	*	111	0	0	-1	*	161	1	-1	-1	*	211	0	0	1	*	261	0	0	0	*	311	-1	0	1	*	361	0	0	0	*
12	0	0		*	62	-1	1	1	*	112	0	0	0	*	162	0	0	0	*	212	1	-1	-1	*	262	0	0	0	*	312	1	0	0	*	362	0	0	0	*
13	1	0	-1	*	63	0	0	0	*	113	0	0	0	*	163	0	0	0	*	213	0	0	1	*	263	0	0	0	*	313	1	0	0	*	363	0	0	0	*
14	0	0		*	64	0	0	0	*	114	0	0	0	*	164	0	0	0	*	214	0	0	1	*	264	0	0	0	*	314	1	0	0	*	364	0	0	0	*
15	0	0		*	65	1	-1	-1	*	115	0	0	0	*	165	0	0	0	*	215	0	0	1	*	265	0	0	0	*	315	0	0	0	*	365	1	-1	-1	*
16	1	0	-1	*	66	-1	0	1	*	116	0	0	0	*	166	0	0	0	*	216	0	0	1	*	266	-1	1	1	*	316	-1	1	1	*	366	0	0	0	*
17	0	0		*	67	1	0	-1	*	117	0	0	0	*	167	0	0	0	*	217	0	0	1	*	267	0	0	0	*	317	0	0	0	*	367	1	0	-1	*
18	-1	1	0	*	68	0	0	0	*	118	0	0	0	*	168	-1	0	1	*	218	0	0	1	*	268	0	0	0	*	318	-1	0	1	*	368	0	0	0	*
19	-1	0	1	*	69	0	0	0	*	119	0	0	0	*	169	1	-1	-1	*	219	0	0	1	*	269	0	0	0	*	319	0	0	0	*	369	1	0	-1	*
20	0	0	0	*	70	0	0	0	*	120	0	0	0	*	170	0	0	0	*	220	0	0	0	*	270	1	0	-1	*	320	1	0	-1	*	370	0	0	0	*
21	0	0	0	*	71	-1	1	1	*	121	-1	0	1	*	171	0	0	0	*	221	0	0	0	*	271	0	0	0	*	321	0	0	0	*	371	0	0	0	*
22	1	0	-1	*	72	1	-1	-1	*	122	-1	0	1	*	172	0	0	0	*	222	0	0	0	*	272	0	0	0	*	322	0	0	0	*	372	0	0	0	*
23	0	0	0	*	73	0	0	0	*	123	0	0	0	*	173	0	0	0	*	223	0	0	0	*	273	0	0	0	*	323	0	0	0	*	373	0	0	0	*
24	0	0	0	*	74	0	0	0	*	124	0	0	0	*	174	1	-1	-1	*	224	0	0	0	*	274	-1	0	1	*	324	0	0	0	*	374	0	0	0	*
25	-1	0	1	*	75	-1	0	1	*	125	0	0	0	*	175	0	0	0	*	225	0	0	0	*	275	0	0	0	*	325	0	0	0	*	375	0	0	0	*
26	0	0	0	*	76	0	0	0	*	126	0	0	0	*	176	0	0	0	*	226	0	0	0	*	276	0	0	0	*	326	-1	0	1	*	376	0	0	0	*
27	0	0	0	*	77	1	-1	-1	*	127	1	0	-1	*	177	0	0	0	*	227	0	0	0	*	277	0	0	0	*	327	0	0	0	*	377	1	0	-1	*
28	0	0	0	*	78	1	0	-1	*	128	0	0	0	*	178	1	0	0	*	228	0	0	0	*	278	0	0	0	*	328	0	0	0	*	378	0	0	0	*
29	0	0	0	*	79	0	0	0	*	129	0	0	0	*	179	0	0	0	*	229	0	0	0	*	279	0	0	0	*	329	0	0	0	*	379	0	0	0	*
30	1	0	-1	*	80	0	0	0	*	130	0	0	0	*	180	0	0	0	*	230	0	0	0	*	280	1	0	-1	*	330	0	0	0	*	380	0	0	0	*
31	1	0	-1	*	81	0	0	0	*	131	0	0	0	*	181	-1	0	1	*	231	0	0	0	*	281	0	0	0	*	331	-1	-1	1	*	381	0	0	0	*
32	0	0	0	*	82	0	0	0	*	132	0	0	0	*	182	-1	0	1	*	232	0	0	0	*	282	0	0	0	*	332	-1	0	1	*	382	0	0	0	*
33	0	0	0	*	83	0	0	0	*	133	0	0	0	*	183	0	0	0	*	233	0	0	0	*	283	0	0	0	*	333	0	0	0	*	383	0	0	0	*
34	0	0	0	*	84	0	0	0	*	134	0	0	0	*	184	0	0	0	*	234	0	0	0	*	284	0	0	0	*	334	0	0	0	*	384	0	0	0	*
35	0	0	0	*	85	1	0	-1	*	135	0	0	0	*	185	0	0	0	*	235	1	-1	-1	*	285	0	0	0	*	335	0	0	0	*	385	0	0	0	*
36	0	0	0	*	86	0	0	0	*	136	0	0	0	*	186	0	0	0	*	236	0	0	0	*	286	0	0	0	*	336	0	0	0	*	386	1	-1	-1	*
37	-1	1	0	*	87	1	0	-1	*	137	0	0	0	*	187	0	0	0	*	237	0	0	0	*	287	0	0	0	*	337	0	0	0	*	387	0	0	0	*
38	0	0	0	*	88	0	0	0	*	138	0	0	0	*	188	0	0	0	*	238	0	0	0	*	288	0	0	0	*	338	0	0	0	*	388	0	0	0	*
39	0	0	0	*	89	0	0	0	*	139	1	0	-1	*	189	0	0	0	*	239	0	0	0	*	289	0	0	0	*	339	0	0	0	*	389	0	0	0	*
40	0	0	0	*	90	1	0	-1	*	140	0	0	0	*	190	0	0	0	*	240	0	0	0	*	290	0	0	0	*	340	0	0	0	*	390	1	0	-1	*
41	0	0	0	*	91		0	0	*	141	0	0	0	*	191	0	0	0	*	241	0	0	0	*	291	0	0	0	*	341	0	0	0	*	391	1	-1	-1	*
42	-1	0	1	*	92	0	0	0	*	142	0	0	0	*	192	-1	0	1	*	242	0	0	0	*	292	-1	1	1	*	342	0	0		*	392	0	0	0	*
43	0	0		*	93	0	0	0	*	143	0	0	0	*	193	0	0	0	*	243	0	0	0	*	293	0	0	0	*	343	0	0	0	*	393	0	0	0	*
44	0	0	0	*	94	0	0	0	*	144	0	0	0	*	194	0	0	0	*	244	0	0	0	*	294	0	0	0	*	344	0	0	0	*	394	0	0	0	*
45	0	0		*	95		0	0	*	145	0	0	0	*	195	0	0	0	*	245	0	0	0	*	295	0	0	0	*	345	0	0	0	*	395	0	0	0	*
46	0	0		*	96	0	0	0	*	146	0	0	0	*	196	0	0	0	*	246	0	0	0	*	296	0	0	0	*	346	0	0	0	*	396	0	0	0	*
47	0	0	0	*	97	0	0	0	*	147	0	0	0	*	197	1	-1	-1	*	247	0	0	0	*	297	0	0	0	*	347	0	0	0	*	397	0	0	0	*
48	0	0	0	*	98	-1	0	1	*	148	0	0	0	*	198	0	0	0	*	248	0	0	0	*	298	0	0	0	*	348	0	0	0	*	398	0	0	0	*
49	0	0	0	*	99	0	0	0	*	149	1	-1	-1	*	199	0	0	0	*	249	0	0	0	*	299	0	0	0	*	349	0	0	0	*	399	0	0	0	*
50	0	0	0	*	100	0	0	0	*	150	1	0	-1	*	200	0	0	0	*	250	0	0	0	*	300	0	0	0	*	350	0	0	0	*	400	0	0	0	*

77 = [illegible] IT AS DELETED

87 = [illegible] OF POSITIVE WEIGHTS
92 = [illegible] OF NEGATIVE WEIGHTS

For Conversion
Mean=30.32
S.D.=14.37

Item Weights for Life Insurance Underwriters on WIS-TOTAL Scales

Item #	Weights L	I	D																																					
1	0	0	0	*	51	0	0	0	*	101	0	0	0	*	151	0	0	0	*	201	0	0	0	*	251	0	0	0	*	301	0	0	0	*	351	0	0	0	*
2	0	0	0	*	52	0	0	0	*	102	-1	0	1	*	152	0	0	0	*	202	0	0	0	*	252	0	0	0	*	302	-1	0	1	*	352	1	-1	-1	*
3	0	0	0	*	53	0	0	0	*	103	0	0	0	*	153	0	0	0	*	203	0	0	0	*	253	0	0	0	*	303	0	0	0	*	353	-1	0	1	*
4	1	0	-1	*	54	0	0	0	*	104	0	0	0	*	154	0	0	0	*	204	0	0	0	*	254	0	0	0	*	304	1	-1	-1	*	354	0	0	0	*
5	0	0	0	*	55	0	0	0	*	105	0	0	0	*	155	1	0	-1	*	205	0	0	0	*	255	1	-1	-1	*	305	0	0	0	*	355	0	0	0	*
6	0	0	0	*	56	1	0	-1	*	106	0	0	0	*	156	0	0	0	*	206	0	0	0	*	256	0	0	0	*	306	-1	-1	1	*	356	0	0	0	*
7	0	0	0	*	57	0	0	0	*	107	1	0	-1	*	157	0	0	0	*	207	0	0	0	*	257	-1	0	1	*	307	0	0	0	*	357	0	0	0	*
8	0	0	0	*	58	0	0	0	*	108	0	0	0	*	158	0	0	0	*	208	0	0	0	*	258	0	0	0	*	308	0	0	0	*	358	0	0	0	*
9	0	0	0	*	59	1	-1	-1	*	109	0	0	0	*	159	-1	0	1	*	209	-1	0	1	*	259	0	0	0	*	309	0	0	0	*	359	0	0	0	*
10	0	0	0	*	60	0	0	0	*	110	0	0	0	*	160	1	0	-1	*	210	0	0	0	*	260	0	0	0	*	310	0	0	0	*	360	0	0	0	*
11	0	0	0	*	61	0	0	0	*	111	0	0	0	*	161	0	0	0	*	211	0	0	0	*	261	0	0	0	*	311	1	-1	-1	*	361	0	0	0	*
12	0	0	0	*	62	0	0	0	*	112	0	0	0	*	162	0	0	0	*	212	1	-1	-1	*	262	1	1	-1	*	312	0	0	0	*	362	0	0	0	*
13	-1	0	1	*	63	0	0	0	*	113	0	0	0	*	163	0	0	0	*	213	1	0	-1	*	263	0	0	0	*	313	0	0	0	*	363	0	0	0	*
14	0	0	0	*	64	0	0	0	*	114	0	0	0	*	164	0	0	0	*	214	0	0	0	*	264	-1	-1	1	*	314	1	-1	-1	*	364	0	0	0	*
15	-1	0	1	*	65	0	0	0	*	115	0	0	0	*	165	0	0	0	*	215	0	0	0	*	265	1	0	-1	*	315	0	0	0	*	365	0	0	0	*
16	-1	0	1	*	66	0	0	0	*	116	0	0	0	*	166	0	0	0	*	216	0	0	0	*	266	0	0	0	*	316	0	0	0	*	366	0	0	0	*
17	0	0	0	*	67	0	0	0	*	117	-1	0	1	*	167	1	0	-1	*	217	0	0	0	*	267	0	0	0	*	317	0	0	0	*	367	0	0	0	*
18	0	0	0	*	68	0	0	0	*	118	-1	0	1	*	168	0	0	0	*	218	0	0	0	*	268	0	0	0	*	318	0	0	0	*	368	0	0	0	*
19	0	0	0	*	69	0	0	0	*	119	0	0	0	*	169	0	0	0	*	219	0	0	0	*	269	0	0	0	*	319	0	0	0	*	369	0	0	0	*
20	0	0	0	*	70	0	0	0	*	120	0	0	0	*	170	0	0	0	*	220	0	0	0	*	270	0	0	0	*	320	-1	0	1	*	370	0	0	0	*
21	0	0	0	*	71	0	0	0	*	121	0	0	0	*	171	0	0	0	*	221	0	0	0	*	271	0	0	0	*	321	0	0	0	*	371	0	0	0	*
22	0	0	0	*	72	0	0	0	*	122	0	0	0	*	172	1	0	-1	*	222	0	0	0	*	272	-1	-1	1	*	322	-1	0	1	*	372	0	0	0	*
23	-1	0	1	*	73	0	0	0	*	123	0	0	0	*	173	0	0	0	*	223	0	0	0	*	273	0	0	0	*	323	0	0	0	*	373	0	0	0	*
24	0	0	0	*	74	0	0	0	*	124	0	0	0	*	174	0	0	0	*	224	0	0	0	*	274	1	0	-1	*	324	-1	0	1	*	374	1	-1	-1	*
25	0	0	0	*	75	0	0	0	*	125	0	0	0	*	175	0	0	0	*	225	0	0	0	*	275	-1	0	1	*	325	0	0	0	*	375	0	0	0	*
26	0	0	0	*	76	0	0	0	*	126	0	0	0	*	176	-1	0	1	*	226	0	0	0	*	276	0	0	0	*	326	1	0	-1	*	376	0	0	0	*
27	0	0	0	*	77	0	0	0	*	127	-1	0	1	*	177	0	0	0	*	227	0	0	0	*	277	0	0	0	*	327	0	0	0	*	377	-1	1	1	*
28	0	0	0	*	78	0	0	0	*	128	0	0	0	*	178	-1	0	1	*	228	0	0	0	*	278	0	0	0	*	328	-1	0	1	*	378	0	0	0	*
29	0	0	0	*	79	0	0	0	*	129	0	0	0	*	179	0	0	0	*	229	0	0	0	*	279	0	0	0	*	329	0	0	0	*	379	0	0	0	*
30	0	0	0	*	80	0	0	0	*	130	0	0	0	*	180	0	0	0	*	230	0	0	0	*	280	0	0	0	*	330	0	0	0	*	380	0	0	0	*
31	0	0	0	*	81	1	0	-1	*	131	0	0	0	*	181	0	0	0	*	231	0	0	0	*	281	0	0	0	*	331	0	0	0	*	381	0	0	0	*
32	0	0	0	*	82	0	0	0	*	132	-1	0	1	*	182	1	-1	-1	*	232	0	0	0	*	282	0	0	0	*	332	0	0	0	*	382	0	0	0	*
33	0	0	0	*	83	0	0	0	*	133	0	0	0	*	183	0	0	0	*	233	0	0	0	*	283	0	0	0	*	333	0	0	0	*	383	0	0	0	*
34	-1	0	1	*	84	0	0	0	*	134	0	0	0	*	184	1	0	-1	*	234	0	0	0	*	284	-1	0	1	*	334	1	0	-1	*	384	0	0	0	*
35	0	0	0	*	85	0	0	0	*	135	0	0	0	*	185	0	0	0	*	235	0	0	0	*	285	1	-1	-1	*	335	0	0	0	*	385	-1	0	1	*
36	0	0	0	*	86	0	0	0	*	136	1	0	-1	*	186	-1	0	1	*	236	0	0	0	*	286	1	0	-1	*	336	1	0	-1	*	386	-1	0	1	*
37	0	0	0	*	87	0	0	0	*	137	0	0	0	*	187	0	0	0	*	237	0	0	0	*	287	-1	0	1	*	337	1	0	-1	*	387	0	0	0	*
38	0	0	0	*	88	0	0	0	*	138	0	0	0	*	188	1	-1	-1	*	238	0	0	0	*	288	0	0	0	*	338	0	0	0	*	388	0	0	0	*
39	-1	0	1	*	89	0	0	0	*	139	0	0	0	*	189	0	0	0	*	239	0	0	0	*	289	-1	0	1	*	339	0	0	0	*	389	0	0	0	*
40	0	0	0	*	90	-1	0	1	*	140	0	0	0	*	190	0	0	0	*	240	0	0	0	*	290	0	0	0	*	340	0	0	0	*	390	0	0	0	*
41	0	0	0	*	91	0	0	0	*	141	0	0	0	*	191	0	0	0	*	241	0	0	0	*	291	0	0	0	*	341	0	0	0	*	391	0	0	0	*
42	0	0	0	*	92	0	0	0	*	142	-1	0	1	*	192	0	0	0	*	242	-1	-1	1	*	292	0	0	0	*	342	0	0	0	*	392	0	0	0	*
43	0	0	0	*	93	0	0	0	*	143	-1	0	1	*	193	0	0	0	*	243	0	0	0	*	293	0	0	0	*	343	0	0	0	*	393	0	0	0	*
44	0	0	0	*	94	1	0	-1	*	144	1	0	-1	*	194	0	0	0	*	244	-1	-1	1	*	294	0	0	0	*	344	-1	1	1	*	394	1	-1	-1	*
45	1	0	-1	*	95	0	0	0	*	145	1	0	-1	*	195	1	-1	-1	*	245	0	0	0	*	295	0	0	0	*	345	0	0	0	*	395	0	0	0	*
46	0	0	0	*	96	0	0	0	*	146	0	0	0	*	196	0	0	0	*	246	0	0	0	*	296	0	0	0	*	346	0	0	0	*	396	0	0	0	*
47	0	0	0	*	97	0	0	0	*	147	0	0	0	*	197	0	0	0	*	247	0	0	0	*	297	0	0	0	*	347	0	0	0	*	397	0	0	0	*
48	0	0	0	*	98	0	0	0	*	148	0	0	0	*	198	0	0	0	*	248	0	0	0	*	298	0	0	0	*	348	0	0	0	*	398	0	0	0	*
49	0	0	0	*	99	0	0	0	*	149	0	0	0	*	199	-1	0	1	*	249	0	0	0	*	299	-1	0	1	*	349	0	0	0	*	399	0	0	0	*
50	0	0	0	*	100	0	0	0	*	150	0	0	0	*	200	0	0	0	*	250	0	0	0	*	300	0	0	0	*	350	0	0	0	*	400	0	0	0	*

77 = NUMBER OF ITEMS WEIGHTED

80 = NUMBER OF POSITIVE WEIGHTS
95 = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean=26.24
S.D.=14.02

Item Weights for Radiologic Technologists on WIG-TOTAL Scales

```
       Weights
Item # L  I  D
  1  0  0  0 .  51  0  0  0 * 101  1  0 -1 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
  2  1  0 -1 .  52  0  0  0 * 102  1  0 -1 * 152 -1  0  1 * 202  0  0  0 * 252  1  0 -1 * 302  0  0  0 * 352  0  0  0 *
  3  0  0  0 .  53  0  0  0 * 103  0  0  0 * 153  0  0  0 * 203  1  0 -1 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
  4  0  0  0 .  54  1  0 -1 * 104  0  0  0 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
  5  0  0  0 .  55  0  0  0 * 105  1  0 -1 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
  6  0  0  0 .  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
  7  0  0  0 .  57  0  0  0 * 107  0  0  0 * 157  0  0  0 * 207  0  0  0 * 257  0  0  0 * 307  0  0  0 * 357  0  0  0 *
  8  1  0 -1 .  58  0  0  0 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
  9 -1  0  1 .  59  0  0  0 * 109  0  0  0 * 159  1  0 -1 * 209  1  0 -1 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
 10  0  0  0 .  60  0  0  0 * 110  1  0 -1 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310  0  0  0 * 360  0  0  0 *
 11  0  0  0 .  61  0  0  0 * 111  1  0 -1 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311 -1  0  1 * 361  0  0  0 *
 12  1  0 -1 .  62  0  0  0 * 112  0  0  0 * 162  0  0  0 * 212  0  0  0 * 262  0  0  0 * 312  0  0  0 * 362  0  0  0 *
 13  1  0 -1 .  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  0  0  0 *
 14  0  0  0 .  64  1  0 -1 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
 15  0  0  0 .  65  0  0  0 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  0  0  0 * 365  0  0  0 *
 16  1  0 -1 .  66  0  0  0 * 116  0  0  0 * 166  0  0  0 * 216  0  0  0 * 266  0  0  0 * 316  0  0  0 * 366  0  0  0 *
 17  0  0  0 .  67  0  0  0 * 117 -1  0  1 * 167  0  0  0 * 217  0  0  0 * 267  0  0  0 * 317  0  0  0 * 367  1  0 -1 *
 18  0  0  0 .  68 -1  0  1 * 118  0  0  0 * 168  1  0 -1 * 218  0  0  0 * 268  0  0  0 * 318  0  0  0 * 368  0  0  0 *
 19  0  0  0 .  69  0  0  0 * 119  0  0  0 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  1  1 -1 * 369  1  0 -1 *
 20  0  0  0 .  70  0  0  0 * 120  0  0  0 * 170  0  0  0 * 220  0  0  0 * 270  0  0  0 * 320  0  0  0 * 370  0  0  0 *
 21  0  0  0 .  71  0  0  0 * 121  0  0  0 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  0  0  0 *
 22  1  0 -1 .  72  1  0 -1 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  1  0 -1 * 322  0  0  0 * 372 -1  1  1 *
 23  0  0  0 .  73  1  0 -1 * 123  0  0  0 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  0  0  0 *
 24 -1  1  1 .  74  0  0  0 * 124  0  0  0 * 174  1 -1 -1 * 224  0  0  0 * 274 -1  0  1 * 324  1  0 -1 * 374  0  0  0 *
 25  0  0  0 .  75  0  0  0 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375  0  0  0 *
 26  0  0  0 .  76 -1  0  1 * 126  0  0  0 * 176  1  0 -1 * 226  0  0  0 * 276 -1  0  1 * 326 -1  0  1 * 376  0  0  0 *
 27  0  0  0 .  77  1  0 -1 * 127  1 -1 -1 * 177  0  0  0 * 227  0  0  0 * 277  0  0  0 * 327  0  0  0 * 377  0  0  0 *
 28  0  0  0 .  78  1  0 -1 * 128  1  1 -1 * 178  0  0  0 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378  0  0  0 *
 29 -1  0  1 .  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279  0  0  0 * 329  0  0  0 * 379  0  0  0 *
 30  1  1 -1 .  80 -1  0  1 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280  1  0 -1 * 330 -1  0  1 * 380  0  0  0 *
 31  0  0  0 .  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331  0  0  0 * 381  0  0  0 *
 32  0  0  0 .  82  0  0  0 * 132  0  0  0 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382  0  0  0 *
 33  0  0  0 .  83  0  0  0 * 133  0  0  0 * 183  0  0  0 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383  0  0  0 *
 34  0  0  0 .  84  0  0  0 * 134  0  0  0 * 184 -1  0  1 * 234  0  0  0 * 284  0  0  0 * 334 -1  0  1 * 384  0  0  0 *
 35  0  0  0 .  85  0  0  0 * 135  0  0  0 * 185  0  0  0 * 235  1 -1 -1 * 285  0  0  0 * 335  0  0  0 * 385  0  0  0 *
 36 -1  0  1 .  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286  0  0  0 * 336  0  0  0 * 386  0  0  0 *
 37  0  0  0 .  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  0  0  0 *
 38  1  0 -1 .  88  0  0  0 * 138  0  0  0 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388  0  0  0 *
 39  0  0  0 .  89  0  0  0 * 139 -1  0  1 * 189  0  0  0 * 239  0  0  0 * 289  1 -1 -1 * 339  0  0  0 * 389  0  0  0 *
 40  0  0  0 .  90  1  0 -1 * 140  0  0  0 * 190 -1  0  1 * 240  0  0  0 * 290  0  0  0 * 340  0  0  0 * 390  1  0 -1 *
 41  0  0  0 .  91  0  0  0 * 141  0  0  0 * 191 -1  0  1 * 241  0  0  0 * 291  0  0  0 * 341  0  0  0 * 391  1 -1 -1 *
 42  0  0  0 .  92 -1  1  1 * 142  1  0 -1 * 192  0  0  0 * 242  0  0  0 * 292  0  0  0 * 342  0  0  0 * 392  0  0  0 *
 43  0  0  0 .  93  0  0  0 * 143  0  0  0 * 193  0  0  0 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
 44  0  0  0 .  94  0  0  0 * 144  0  0  0 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394 -1  0  1 *
 45  0  0  0 .  95  0  0  0 * 145  0  0  0 * 195 -1  1  1 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
 46  0  0  0 .  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  1  0 -1 * 346  0  0  0 * 396  0  0  0 *
 47  0  0  0 .  97  0  0  0 * 147  0  0  0 * 197  1 -1 -1 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
 48  0  0  0 .  98  0  0  0 * 148  0  0  0 * 198  0  0  0 * 248  0  0  0 * 298  0  0  0 * 348  0  0  0 * 398  0  0  0 *
 49  0  0  0 .  99  0  0  0 * 149  0  0  0 * 199  1  0 -1 * 249  0  0  0 * 299  0  0  0 * 349 -1  1  1 * 399  0  0  0 *
 50  0  0  0 . 100  0  0  0 * 150  0  0  0 * 200  0  0  0 * 250  0  0  0 * 300  0  0  0 * 350  0  0  0 * 400  0  0  0 *

67 = NUMBER OF ITEMS WEIGHTED

75 = NUMBER OF POSITIVE WEIGHTS
73 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion:
Mean=17.25
S.D.=13.01

Item Weights for Radiologic Technologists on WIG-NP Scales

```
     Weights
Item # L  I  D
   1  0  0  0 *  51  0  0  0 * 101  1  0 -1 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
   2  0  0  0 *  52  0  0  0 * 102  1  0 -1 * 152  0  0  0 * 202  0  0  0 * 252  0  0  0 * 302  0  0  0 * 352  0  0  0 *
   3  0  0  0 *  53  0  0  0 * 103  0  0  0 * 153  0  0  0 * 203  1 -1 -1 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
   4  0  0  0 *  54  1  0 -1 * 104  0  0  0 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
   5  0  0  0 *  55  0  0  0 * 105  0  0  0 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
   6  0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
   7  0  0  0 *  57  0  0  0 * 107 -1  0  1 * 157  0  0  0 * 207 -1  0  1 * 257  0  0  0 * 307  0  0  0 * 357  0  0  0 *
   8  0  0  0 *  58  0  0  0 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
   9  0  0  0 *  59 -1 -1  1 * 109 -1  0  1 * 159  1  0 -1 * 209  0  0  0 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
  10  0  0  0 *  60  0  0  0 * 110  0  0  0 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310  0  0  0 * 360  0  0  0 *
  11  1  0 -1 *  61  0  0  0 * 111  1  0 -1 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311  0  0  0 * 361  0  0  0 *
  12  0  0  0 *  62  0  0  0 * 112  0  0  0 * 162  0  0  0 * 212  0  0  0 * 262  0  0  0 * 312  0  0  0 * 362  0  0  0 *
  13  1  0 -1 *  63  0  0  0 * 113 -1  0  1 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  0  0  0 *
  14 -1  0  1 *  64  0  0  0 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
  15  0  0  0 *  65  0  0  0 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  0  0  0 * 365  0  0  0 *
  16  1  0 -1 *  66  0  0  0 * 116 -1  0  1 * 166  0  0  0 * 216  0  0  0 * 266  0  0  0 * 316  0  0  0 * 366 -1  0  1 *
  17  0  0  0 *  67  0  0  0 * 117  0  0  0 * 167 -1  0  1 * 217  0  0  0 * 267  0  0  0 * 317  0  0  0 * 367  1  0 -1 *
  18 -1  0  1 *  68  0  0  0 * 118  0  0  0 * 168  0  0  0 * 218  0  0  0 * 268  0  0  0 * 318  0  0  0 * 368  0  0  0 *
  19  0  0  0 *  69  0  0  0 * 119  0  0  0 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  0  0  0 * 369  1  0 -1 *
  20 -1  0  1 *  70  0  0  0 * 120  0  0  0 * 170  0  0  0 * 220  0  0  0 * 270  0  0  0 * 320  1  0 -1 * 370  0  0  0 *
  21 -1  0  1 *  71  0  0  0 * 121 -1  0  1 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371 -1  0  1 *
  22  1  0 -1 *  72  1  0 -1 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  0  0  0 * 322  0  0  0 * 372  0  0  0 *
  23  0  0  0 *  73  0  0  0 * 123  0  0  0 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373 -1  0  1 *
  24  0  0  0 *  74 -1 -1  1 * 124  0  0  0 * 174  0  0  0 * 224  0  0  0 * 274  0  0  0 * 324  0  0  0 * 374  0  0  0 *
  25  0  0  0 *  75 -1  0  1 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375  0  0  0 *
  26  0  0  0 *  76  0  0  0 * 126  0  0  0 * 176  1  0 -1 * 226  0  0  0 * 276  0  0  0 * 326 -1  0  1 * 376  0  0  0 *
  27  0  0  0 *  77  1  0 -1 * 127  1 -1 -1 * 177  0  0  0 * 227  0  0  0 * 277  0  0  0 * 327  0  0  0 * 377  1 -1 -1 *
  28  0  0  0 *  78  1  0 -1 * 128  0  0  0 * 178 -1  0  1 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378  0  0  0 *
  29  0  0  0 *  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279 -1  0  1 * 329  0  0  0 * 379  0  0  0 *
  30  0  0  0 *  80  0  0  0 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280  1  0 -1 * 330  0  0  0 * 380  0  0  0 *
  31  0  0  0 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331  0  0  0 * 381  0  0  0 *
  32  0  0  0 *  82  0  0  0 * 132  0  0  0 * 182 -1  0  1 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382  0  0  0 *
  33  0  0  0 *  83  0  0  0 * 133  0  0  0 * 183  0  0  0 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383  0  0  0 *
  34  0  0  0 *  84  0  0  0 * 134  0  0  0 * 184  0  0  0 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384  0  0  0 *
  35  0  0  0 *  85  0  0  0 * 135  0  0  0 * 185  0  0  0 * 235  0  0  0 * 285  0  0  0 * 335  0  0  0 * 385  0  0  0 *
  36  0  0  0 *  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286  0  0  0 * 336  0  0  0 * 386  0  0  0 *
  37 -1  1  1 *  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  0  0  0 *
  38  1  0 -1 *  88  0  0  0 * 138  0  0  0 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388  0  0  0 *
  39  0  0  0 *  89 -1  0  1 * 139  0  0  0 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
  40  0  0  0 *  90  1  0 -1 * 140  0  0  0 * 190 -1  0  1 * 240  0  0  0 * 290  0  0  0 * 340  0  0  0 * 390  1 -1 -1 *
  41  0  0  0 *  91  0  0  0 * 141  0  0  0 * 191  0  0  0 * 241  0  0  0 * 291  0  0  0 * 341  0  0  0 * 391  1 -1 -1 *
  42  0  0  0 *  92  0  0  0 * 142  0  0  0 * 192  0  0  0 * 242  0  0  0 * 292  0  0  0 * 342  0  0  0 * 392  0  0  0 *
  43 -1  0  1 *  93  0  0  0 * 143  0  0  0 * 193  0  0  0 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  1 -1 -1 *
  44  0  0  0 *  94  0  0  0 * 144  0  0  0 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
  45  0  0  0 *  95 -1  0  1 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395 -1  0  1 *
  46 -1  0  1 *  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396  0  0  0 *
  47  0  0  0 *  97  0  0  0 * 147  0  0  0 * 197  1 -1 -1 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
  48 -1  0  1 *  98 -1  0  1 * 148  0  0  0 * 198  0  0  0 * 248  0  0  0 * 298  1  0 -1 * 348  0  0  0 * 398  0  0  0 *
  49  0  0  0 *  99  0  0  0 * 149 -1  1  1 * 199  1  0 -1 * 249  0  0  0 * 299  0  0  0 * 349  0  0  0 * 399  0  0  0 *
  50  0  0  0 * 100  0  0  0 * 150  0  0  0 * 200  0  0  0 * 250  0  0  0 * 300  1  1 -1 * 350  0  0  0 * 400  0  0  0 *

  60 = NUMBER OF ITEMS WEIGHTED

  63 = NUMBER OF POSITIVE WEIGHTS
  69 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion
Mean=16.56
S.D.=15.39

Item Weights for Saleswomen on WIG-TOTAL Scales

```
        Weights
Item #  L  I  D
  1  0  0  0 *  51  0  0  0 * 101  0  0  0 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
  2  1  0 -1 *  52  0  0  0 * 102  0  0  0 * 152  0  0  0 * 202  0  0  0 * 252  1 -1 -1 * 302  0  0  0 * 352  0  0  0 *
  3  1  1 -1 *  53  0  0  0 * 103 -1  0  1 * 153  1 -1 -1 * 203  0  0  0 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
  4  0  0  0 *  54  0  0  0 * 104  0  0  0 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
  5 -1  0  1 *  55  0  0  0 * 105  0  0  0 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
  6  0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  1 -1 -1 * 206  1  0 -1 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
  7  0  0  0 *  57  0  0  0 * 107  1 -1 -1 * 157  0  0  0 * 207  1 -1 -1 * 257  0  0  0 * 307  0  0  0 * 357  0  0  0 *
  8  0  0  0 *  58  0  0  0 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
  9  0  0  0 *  59  1  1 -1 * 109  1  1 -1 * 159  0  0  0 * 209  1 -1 -1 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
 10  0  0  0 *  60  0  0  0 * 110  0  0  0 * 160  0  0  0 * 210 -1  1  1 * 260  0  0  0 * 310  0  0  0 * 360  0  0  0 *
 11  0  0  0 *  61  1  0 -1 * 111  0  0  0 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311 -1  0  1 * 361  0  0  0 *
 12  0  0  0 *  62  0  0  0 * 112  0  0  0 * 162  0  0  0 * 212  0  0  0 * 262  1  1 -1 * 312  0  0  0 * 362  0  0  0 *
 13  0  0  0 *  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313 -1  0  1 * 363  0  0  0 *
 14  1  1 -1 *  64  0  0  0 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
 15  1  0 -1 *  65  1  0 -1 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  1 -1 -1 * 365  0  0  0 *
 16  0  0  0 *  66  1  0 -1 * 116  0  0  0 * 166  0  0  0 * 216  0  0  0 * 266  1  0 -1 * 316  0  0  0 * 366  1  0 -1 *
 17  1  0 -1 *  67  0  0  0 * 117 -1  1  1 * 167  1  1 -1 * 217  0  0  0 * 267  1  0 -1 * 317  0  0  0 * 367  0  0  0 *
 18  1 -1 -1 *  68  0  0  0 * 118  0  0  0 * 168  0  0  0 * 218  0  0  0 * 268  0  0  0 * 318 -1  0  1 * 368  0  0  0 *
 19  0  0  0 *  69  0  0  0 * 119  0  0  0 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  0  0  0 * 369  0  0  0 *
 20  1  0 -1 *  70  0  0  0 * 120  1  0 -1 * 170  0  0  0 * 220  0  0  0 * 270 -1  1  1 * 320 -1  0  1 * 370  0  0  0 *
 21  0  0  0 *  71  0  0  0 * 121  1  1 -1 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  1 -1 -1 *
 22  0  0  0 *  72  1  0 -1 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  1  1 -1 * 322  0  0  0 * 372  0  0  0 *
 23  1  0 -1 *  73  0  0  0 * 123  1  0 -1 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  0  0  0 *
 24 -1  1  1 *  74  1  1 -1 * 124  0  0  0 * 174  0  0  0 * 224  0  0  0 * 274 -1  1  1 * 324  1  0 -1 * 374  0  0  0 *
 25  1  1 -1 *  75  1  1 -1 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375  0  0  0 *
 26  0  0  0 *  76  0  0  0 * 126  0  0  0 * 176  0  0  0 * 226  1 -1 -1 * 276  0  0  0 * 326  1  0 -1 * 376  0  0  0 *
 27  0  0  0 *  77  0  0  0 * 127  0  0  0 * 177  0  0  0 * 227  1 -1 -1 * 277  0  0  0 * 327  0  0  0 * 377  0  0  0 *
 28  0  0  0 *  78  0  0  0 * 128  0  0  0 * 178  1 -1 -1 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378  0  0  0 *
 29  0  0  0 *  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229 -1  0  1 * 279  1  0 -1 * 329  0  0  0 * 379  0  0  0 *
 30  0  0  0 *  80  0  0  0 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280  0  0  0 * 330  0  0  0 * 380  0  0  0 *
 31  0  0  0 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331 -1 -1  1 * 381  0  0  0 *
 32  0  0  0 *  82  0  0  0 * 132  0  0  0 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382  0  0  0 *
 33  0  0  0 *  83  0  0  0 * 133  0  0  0 * 183  1 -1 -1 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383  0  0  0 *
 34  0  0  0 *  84  0  0  0 * 134  0  0  0 * 184  0  0  0 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384  0  0  0 *
 35  0  0  0 *  85  1  0 -1 * 135  0  0  0 * 185  0  0  0 * 235  0  0  0 * 285  0  0  0 * 335  0  0  0 * 385  0  0  0 *
 36  0  0  0 *  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286 -1  0  1 * 336  0  0  0 * 386  0  0  0 *
 37  1  0 -1 *  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  1 -1 -1 *
 38  0  0  0 *  88 -1  1  1 * 138  1  0 -1 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388 -1  1  1 *
 39  0  0  0 *  89  1  1 -1 * 139  0  0  0 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
 40  0  0  0 *  90  0  0  0 * 140  0  0  0 * 190  0  0  0 * 240  0  0  0 * 290  0  0  0 * 340  0  0  0 * 390  0  0  0 *
 41  0  0  0 *  91  0  0  0 * 141  0  0  0 * 191 -1  1  1 * 241  1 -1 -1 * 291  0  0  0 * 341  0  0  0 * 391  0  0  0 *
 42  0  0  0 *  92  0  0  0 * 142  0  0  0 * 192  0  0  0 * 242 -1 -1  1 * 292  0  0  0 * 342  0  0  0 * 392  0  0  0 *
 43  1  1 -1 *  93  0  0  0 * 143  0  0  0 * 193  0  0  0 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
 44  1  0 -1 *  94  1  0 -1 * 144  0  0  0 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
 45  0  0  0 *  95  1 -1 -1 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
 46  1  0 -1 *  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396  0  0  0 *
 47  0  0  0 *  97  0  0  0 * 147  0  0  0 * 197  0  0  0 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  1 -1 -1 *
 48  1  0 -1 *  98  1 -1 -1 * 148  0  0  0 * 198  0  0  0 * 248  1 -1 -1 * 298 -1  0  1 * 348  0  0  0 * 398  0  0  0 *
 49  0  0  0 *  99  0  0  0 * 149  0  0  0 * 199  0  0  0 * 249  0  0  0 * 299 -1  0  1 * 349 -1  1  1 * 399  0  0  0 *
 50  0  0  0 * 100  0  0  0 * 150  0  0  0 * 200  0  0  0 * 250  0  0  0 * 300 -1 -1  1 * 350  0  0  0 * 400  0  0  0 *

 79 = NUMBER OF ITEMS WEIGHTED

101 = NUMBER OF POSITIVE WEIGHTS
111 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion:
Mean=31.68
S.D.=17.29

Item Weights for Saleswomen on WIG-NP Scales

```
        Weights
Item #  L  I  D
   1    0  0  0 *  51  0  0  0 * 101  0  0  0 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
   2    0  0  0 *  52  0  0  0 * 102  0  0  0 * 152  0  0  0 * 202  0  0  0 * 252  0  0  0 * 302  0  0  0 * 352  0  0  0 *
   3    0  0  0 *  53  0  0  0 * 103  0  0  0 * 153  1 -1 -1 * 203 -1  0  1 * 253  0  0  0 * 303  0  0  0 * 353 -1  0  1 *
   4    0  0  0 *  54  0  0  0 * 104  0  0  0 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
   5    0  0  0 *  55  0  0  0 * 105 -1  0  1 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  1  0 -1 * 355  0  0  0 *
   6    0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  1 -1 -1 * 206  0  0  0 * 256  0  0  0 * 306 -1  0  1 * 356  0  0  0 *
   7    0  0  0 *  57 -1  0  1 * 107  1 -1 -1 * 157  0  0  0 * 207  1 -1 -1 * 257  0  0  0 * 307  0  0  0 * 357  0  0  0 *
   8    0  0  0 *  58  1  0 -1 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
   9    0  0  0 *  59  1  1 -1 * 109  0  0  0 * 159 -1  0  1 * 209  1 -1 -1 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
  10    0  0  0 *  60  0  0  0 * 110  0  0  0 * 160  0  0  0 * 210 -1  0  1 * 260  0  0  0 * 310  0  0  0 * 360  0  0  0 *
  11    0  0  0 *  61  1  0 -1 * 111 -1  0  1 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311 -1  0  1 * 361  0  0  0 *
  12    0  0  0 *  62  0  0  0 * 112  0  0  0 * 162  0  0  0 * 212  1 -1 -1 * 262  1  0 -1 * 312  0  0  0 * 362  0  0  0 *
  13   -1  0  1 *  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  0  0  0 *
  14    1  0 -1 *  64  0  0  0 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
  15    0  0  0 *  65  0  0  0 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  1  0 -1 * 365  0  0  0 *
  16   -1  0  1 *  66  0  0  0 * 116  0  0  0 * 166  0  0  0 * 216  0  0  0 * 266  0  0  0 * 316  0  0  0 * 366  0  0  0 *
  17    0  0  0 *  67  0  0  0 * 117  0  0  0 * 167  0  0  0 * 217  0  0  0 * 267  0  0  0 * 317 -1  0  1 * 367  0  0  0 *
  18    1  0 -1 *  68  0  0  0 * 118  0  0  0 * 168  0  0  0 * 218  0  0  0 * 268 -1  0  1 * 318 -1  0  1 * 368  0  0  0 *
  19    0  0    *  69  0  0  0 * 119  0  0  0 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  0  0  0 * 369 -1  1  1 *
  20    1  0 -1 *  70  0  0  0 * 120  1  0 -1 * 170  0  0  0 * 220  0  0  0 * 270  0  0  0 * 320 -1 -1  1 * 370  0  0  0 *
  21    0  0  0 *  71  0  0  0 * 121  0  0  0 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  0  0  0 *
  22   -1  0  1 *  72  0  0  0 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  0  0  0 * 322  0  0  0 * 372  0  0  0 *
  23    0  0  0 *  73  0  0  0 * 123  0  0  0 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  0  0  0 *
  24    0  0  0 *  74  1  0 -1 * 124  0  0  0 * 174  0  0  0 * 224  0  0  0 * 274 -1  0  1 * 324  0  0  0 * 374  0  0  0 *
  25    0  0  0 *  75  0  0  0 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375  0  0  0 *
  26    0  0  0 *  76  0  0  0 * 126  0  0  0 * 176 -1  0  1 * 226  0  0  0 * 276  0  0  0 * 326  1  0 -1 * 376  0  0  0 *
  27    0  0  0 *  77  0  0  0 * 127  0  0  0 * 177  0  0  0 * 227  0  0  0 * 277  0  0  0 * 327  0  0  0 * 377  0  0  0 *
  28    0  0  0 *  78  0  0  0 * 128  0  0  0 * 178  0  0  0 * 228  0  0  0 * 278  0  0  0 * 328 -1  0  1 * 378  0  0  0 *
  29    0  0  0 *  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279  1  0 -1 * 329  0  0  0 * 379  0  0  0 *
  30    0  0  0 *  80  0  0  0 * 130  0  0  0 * 180  0  0  0 * 230  1 -1 -1 * 280  0  0  0 * 330  0  0  0 * 380  0  0  0 *
  31    0  0  0 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331 -1, -1 1 * 381  0  0  0 *
  32    0  0  0 *  82  0  0  0 * 132 -1  0  1 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  1  0 -1 * 382  0  0  0 *
  33    0  0  0 *  83  0  0  0 * 133  0  0  0 * 183  0  0  0 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383  0  0  0 *
  34    0  0  0 *  84  0  0  0 * 134 -1  1  1 * 184  0  0  0 * 234  0  0  0 * 284  0  0  0 * 334  0  0  0 * 384  0  0  0 *
  35    0  0  0 *  85  1  0 -1 * 135  0  0  0 * 185  0  0  0 * 235  0  0  0 * 285  0  0  0 * 335  0  0  0 * 385 -1  0  1 *
  36    0  0  0 *  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286  0  0  0 * 336  0  0  0 * 386  0  0  0 *
  37    0  0  0 *  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  0  0  0 *
  38    0  0  0 *  88 -1  0  1 * 138  1  0 -1 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388  0  0  0 *
  39    0  0  0 *  89  1  0 -1 * 139  1  0 -1 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
  40   -1  0  1 *  90  0  0  0 * 140  0  0  0 * 190  0  0  0 * 240  0  0  0 * 290  0  0  0 * 340  0  0  0 * 390  0  0  0 *
  41    0  0  0 *  91  0  0  0 * 141  0  0  0 * 191  0  0  0 * 241  1 -1 -1 * 291  0  0  0 * 341  0  0  0 * 391  0  0  0 *
  42    0  0  0 *  92  0  0  0 * 142  0  0  0 * 192  0  0  0 * 242  0  0  0 * 292  0  0  0 * 342  0  0  0 * 392  0  0  0 *
  43    1  0 -1 *  93  0  0  0 * 143  0  0  0 * 193  0  0  0 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
  44    0  0  0 *  94  1  0 -1 * 144  0  0  0 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
  45    0  0  0 *  95  1 -1 -1 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
  46    1  0 -1 *  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396  0  0  0 *
  47    0  0  0 *  97  0  0  0 * 147  0  0  0 * 197  0  0  0 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  0  0  0 *
  48    0  0  0 *  98  1 -1 -1 * 148  0  0  0 * 198  0  0  0 * 248  0  0  0 * 298  0  0  0 * 348  0  0  0 * 398  0  0  0 *
  49    0  0  0 *  99  1  0 -1 * 149  0  0  0 * 199  0  0  0 * 249  0  0  0 * 299 -1 -1  1 * 349  0  0  0 * 399  0  0  0 *
  50    0  0  0 * 100  0  0  0 * 150  0  0  0 * 200  0  0  0 * 250  0  0  0 * 300 -1 -1  1 * 350  0  0  0 * 400  0  0  0 *

6[illegible] = NUMBER OF ITEMS WEIGHTED

63 = NUMBER OF POSITIVE WEIGHTS
74 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion
Mean=18.87
S.D.=10.80

Item Weights for Secretarial WI-TOTAL Scales

Item #	Weights L	I	D
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13	-1		1
14			
15	1		-1
16	-1		1
17	1	0	-1
18	1		-1
19			
20			
21			
22	-1	0	1
23			
24	-1	1	1
25			
26			
27			
28			
29			
30			
31			
32			
33			
34	1		-1
35			
36	-1	1	1
37	1	-1	-1
38			
39			
40			
41			
42			
43			
44			
45			
46	1	0	-1
47			
48			
49			
50			

For Conversion:
Mean=20.73
S.D.=16.02

Item Weights for Secretaries on WIS-NP Scales

Item #	Weights L	I	D
1			
2	-1		
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13	-1		
14			
15			
16	-1		
17			
18			
19			
20			
21			
22	-1		
23			
24			
25	-1		
26			
27			
28			
29			
30			
31	-1		
32			
33			
34			
35			
36			
37			
38	-1	-1	
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			

55 = NUMBER OF ITEMS WEIGHTED

62 = NUMBER OF POSITIVE WEIGHTS

64 = NUMBER OF NEGATIVE WEIGHTS

For Conversion
Mean 17.23
S.D. 10.47

Item Weights for Sewing Machine Operators on WIS-TOTAL Scale

Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D
1	[illegible]	[illegible]	[illegible]	51	-1	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	151	[illegible]	[illegible]	[illegible]	201	0	0	0	251	0	[illegible]	0	301	0	[illegible]	[illegible]	351	[illegible]	[illegible]	[illegible]
2	[illegible]	0	[illegible]	52	[illegible]	[illegible]	[illegible]	102	[illegible]	[illegible]	[illegible]	152	-1	[illegible]	[illegible]	202	[illegible]	0	0	252	1	-1	-1	302	0	[illegible]	0	352	0	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	53	[illegible]	[illegible]	[illegible]	103	-1	[illegible]	[illegible]	153	1	-1	-1	203	[illegible]	0	0	253	0	0	0	303	0	0	[illegible]	353	[illegible]	[illegible]	[illegible]
4	0	0	0	54	[illegible]	[illegible]	[illegible]	104	[illegible]	0	0	154	[illegible]	[illegible]	0	204	[illegible]	[illegible]	[illegible]	254	[illegible]	0	0	304	0	0	0	354	[illegible]	0	[illegible]
5	[illegible]	0	[illegible]	55	[illegible]	[illegible]	[illegible]	105	[illegible]	0	[illegible]	155	0	[illegible]	[illegible]	205	0	0	0	255	0	0	[illegible]	305	0	0	0	355	0	0	[illegible]
6	[illegible]	[illegible]	[illegible]	56	[illegible]	[illegible]	[illegible]	106	[illegible]	0	0	156	[illegible]	[illegible]	0	206	[illegible]	0	0	256	0	0	0	306	1	0	-1	356	0	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	57	[illegible]	[illegible]	[illegible]	107	[illegible]	0	0	157	0	[illegible]	[illegible]	207	[illegible]	0	0	257	0	0	0	307	0	0	0	357	0	[illegible]	0
8	0	0	0	58	[illegible]	0	[illegible]	108	0	0	0	158	0	[illegible]	0	208	0	0	0	258	0	0	0	308	0	0	0	358	0	[illegible]	[illegible]
9	0	[illegible]	[illegible]	59	[illegible]	[illegible]	[illegible]	109	1	0	-1	159	0	[illegible]	0	209	1	-1	-1	259	0	0	0	309	0	0	[illegible]	359	0	[illegible]	[illegible]
10	-1	[illegible]	1	60	[illegible]	[illegible]	[illegible]	110	[illegible]	0	[illegible]	160	[illegible]	[illegible]	[illegible]	210	-1	0	1	260	0	0	0	310	-1	0	1	360	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	61	[illegible]	[illegible]	[illegible]	111	[illegible]	0	[illegible]	161	[illegible]	[illegible]	0	211	0	0	0	261	0	0	0	311	0	0	[illegible]	361	[illegible]	[illegible]	[illegible]
12	[illegible]	0	[illegible]	62	[illegible]	0	[illegible]	112	[illegible]	0	[illegible]	162	0	[illegible]	0	212	[illegible]	0	0	262	0	0	0	312	0	0	[illegible]	362	[illegible]	[illegible]	[illegible]
13	0	0	[illegible]	63	[illegible]	[illegible]	[illegible]	113	[illegible]	0	0	163	0	[illegible]	0	213	0	0	0	263	0	0	0	313	0	0	[illegible]	363	[illegible]	[illegible]	[illegible]
14	1	[illegible]	-1	64	[illegible]	[illegible]	[illegible]	114	[illegible]	0	[illegible]	164	0	0	0	214	0	0	0	264	0	0	0	314	0	0	0	364	[illegible]	[illegible]	[illegible]
15	1	[illegible]	-1	65	[illegible]	-1	-1	115	0	0	[illegible]	165	0	[illegible]	0	215	[illegible]	0	0	265	0	0	0	315	0	0	[illegible]	365	[illegible]	[illegible]	[illegible]
16	[illegible]	0	[illegible]	66	[illegible]	[illegible]	[illegible]	116	[illegible]	0	0	166	0	[illegible]	[illegible]	216	0	0	0	266	1	-1	-1	316	0	0	[illegible]	366	[illegible]	[illegible]	-1
17	1	0	-1	67	[illegible]	[illegible]	[illegible]	117	-1	[illegible]	1	167	[illegible]	[illegible]	[illegible]	217	0	0	0	267	1	0	-1	317	0	0	[illegible]	367	0	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	68	[illegible]	[illegible]	[illegible]	118	[illegible]	[illegible]	0	168	[illegible]	0	[illegible]	218	0	0	0	268	0	0	0	318	-1	0	1	368	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	69	[illegible]	[illegible]	[illegible]	119	[illegible]	0	0	169	1	[illegible]	-1	219	0	0	0	269	0	0	0	319	1	[illegible]	-1	369	[illegible]	[illegible]	[illegible]
20	1	0	-1	70	[illegible]	[illegible]	[illegible]	120	[illegible]	0	0	170	-1	[illegible]	1	220	0	0	[illegible]	270	-1	1	1	320	0	[illegible]	[illegible]	370	0	[illegible]	[illegible]
21	0	0	0	71	[illegible]	0	0	121	1	0	-1	171	0	[illegible]	0	221	0	0	0	271	0	0	0	321	0	0	0	371	1	-1	-1
22	[illegible]	0	0	72	0	0	[illegible]	122	[illegible]	0	0	172	0	0	0	222	0	0	0	272	0	0	0	322	0	0	0	372	-1	[illegible]	[illegible]
23	[illegible]	0	[illegible]	73	0	0	[illegible]	123	1	0	-1	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	[illegible]	[illegible]	[illegible]
24	-1	0	1	74	1	0	-1	124	-1	0	1	174	0	0	0	224	0	0	0	274	-1	0	1	324	1	0	-1	374	0	0	0
25	1	0	-1	75	0	0	[illegible]	125	0	0	0	175	0	0	0	225	0	0	0	275	-1	0	1	325	0	0	0	375	0	[illegible]	0
26	0	0	0	76	-1	[illegible]	1	126	0	0	0	176	1	0	-1	226	0	0	0	276	0	0	0	326	0	0	0	376	0	0	[illegible]
27	[illegible]	0	[illegible]	77	0	[illegible]	[illegible]	127	0	0	0	177	0	0	0	227	1	-1	-1	277	0	0	0	327	0	0	0	377	0	[illegible]	[illegible]
28	0	0	0	78	0	0	[illegible]	128	0	0	0	178	1	-1	-1	228	0	0	0	278	-1	-1	1	328	0	0	0	378	0	[illegible]	[illegible]
29	0	0	[illegible]	79	0	[illegible]	[illegible]	129	0	0	0	179	0	0	0	229	-1	0	1	279	1	0	-1	329	0	0	0	379	0	[illegible]	[illegible]
30	0	0	0	80	0	[illegible]	[illegible]	130	-1	0	1	180	0	0	0	230	0	0	0	280	0	0	0	330	0	0	0	380	0	[illegible]	[illegible]
31	0	0	0	81	0	0	0	131	0	0	0	181	0	0	0	231	0	0	0	281	0	0	0	331	-1	-1	1	381	0	0	0
32	0	0	0	82	0	0	0	132	0	0	0	182	0	0	0	232	-1	0	1	282	0	0	0	332	0	0	0	382	0	[illegible]	0
33	-1	0	1	83	[illegible]	[illegible]	[illegible]	133	-1	0	1	183	1	-1	-1	233	0	0	0	283	0	0	0	333	0	0	0	383	[illegible]	0	0
34	1	0	-1	84	[illegible]	[illegible]	[illegible]	134	0	0	0	184	-1	0	1	234	-1	0	1	284	0	0	0	334	-1	0	1	384	0	[illegible]	[illegible]
35	[illegible]	0	[illegible]	85	1	[illegible]	-1	135	[illegible]	0	0	185	0	0	0	235	0	0	0	285	0	0	0	335	0	0	[illegible]	385	0	[illegible]	[illegible]
36	[illegible]	0	[illegible]	86	[illegible]	[illegible]	[illegible]	136	0	0	0	186	1	0	-1	236	0	0	0	286	-1	0	1	336	0	0	0	386	[illegible]	[illegible]	[illegible]
37	0	0	[illegible]	87	-1	[illegible]	1	137	0	0	0	187	0	[illegible]	0	237	0	0	0	287	0	0	0	337	0	0	0	387	0	0	[illegible]
38	[illegible]	0	[illegible]	88	-1	[illegible]	1	138	[illegible]	0	0	188	[illegible]	[illegible]	0	238	0	0	0	288	0	0	0	338	0	0	[illegible]	388	-1	[illegible]	1
39	[illegible]	0	[illegible]	89	0	[illegible]	[illegible]	139	0	0	0	189	0	0	0	239	0	0	0	289	0	0	0	339	0	0	[illegible]	389	0	[illegible]	[illegible]
40	[illegible]	0	[illegible]	90	0	[illegible]	[illegible]	140	0	0	0	190	0	[illegible]	0	240	0	0	0	290	0	0	0	340	0	0	0	390	0	[illegible]	[illegible]
41	[illegible]	0	[illegible]	91	[illegible]	[illegible]	[illegible]	141	0	0	0	191	-1	0	1	241	0	0	0	291	0	0	0	341	0	0	0	391	0	[illegible]	[illegible]
42	-1	[illegible]	1	92	[illegible]	[illegible]	[illegible]	142	1	0	-1	192	1	0	-1	242	0	0	0	292	0	0	0	342	0	0	0	392	-1	[illegible]	[illegible]
43	1	0	-1	93	[illegible]	[illegible]	[illegible]	143	[illegible]	[illegible]	[illegible]	193	-1	[illegible]	1	243	[illegible]	0	0	293	0	0	0	343	0	0	[illegible]	393	-1	[illegible]	[illegible]
44	[illegible]	[illegible]	-1	94	[illegible]	[illegible]	[illegible]	144	[illegible]	[illegible]	0	194	0	[illegible]	0	244	[illegible]	0	0	294	0	0	0	344	0	0	[illegible]	394	[illegible]	[illegible]	[illegible]
45	[illegible]	0	[illegible]	95	[illegible]	[illegible]	[illegible]	145	[illegible]	0	0	195	[illegible]	0	0	245	[illegible]	0	0	295	0	0	0	345	0	0	0	395	[illegible]	[illegible]	-1
46	[illegible]	0	[illegible]	96	[illegible]	[illegible]	[illegible]	146	[illegible]	0	0	196	-1	[illegible]	1	246	[illegible]	0	[illegible]	296	0	0	[illegible]	346	[illegible]	[illegible]	[illegible]	396	-1	[illegible]	[illegible]
47	[illegible]	[illegible]	[illegible]	97	[illegible]	[illegible]	[illegible]	147	[illegible]	[illegible]	[illegible]	197	[illegible]	[illegible]	0	247	[illegible]	0	0	297	[illegible]	0	0	347	0	[illegible]	[illegible]	397	[illegible]	[illegible]	[illegible]
48	[illegible]	[illegible]	[illegible]	98	[illegible]	[illegible]	[illegible]	148	-1	[illegible]	[illegible]	198	[illegible]	[illegible]	[illegible]	248	[illegible]	-1	-1	298	-1	[illegible]	[illegible]	348	[illegible]	[illegible]	[illegible]	398	[illegible]	[illegible]	[illegible]
49	-1	[illegible]	1	99	[illegible]	[illegible]	[illegible]	149	[illegible]	[illegible]	[illegible]	199	[illegible]	[illegible]	[illegible]	249	[illegible]	0	[illegible]	299	-1	0	1	349	-1	0	1	399	0	[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]	100	[illegible]	[illegible]	[illegible]	150	-1	[illegible]	[illegible]	200	[illegible]	[illegible]	[illegible]	250	[illegible]	[illegible]	[illegible]	300	0	0	0	350	0	[illegible]	[illegible]	400	[illegible]	[illegible]	[illegible]

For Conversion
Mean [illegible].47
S.D. 14.[illegible]

Item Weights for Sewing Machine Operators on WIG-NP Scales

Item #	Weights L	I	D
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For conversion
[illegible]
[illegible].27

Item Weights for Airline Stewardesses on WIG-TOTAL Scales

Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D
1		0		51		-1	-1	101		0	0	151	0		0	201	0	0	0	251	0	0	0	301	0			351	0		0
2	1	0	-1	52				102		0		152	0		0	202	1	-1	-1	252	0	0	0	302	0			352	0		0
3		0	0	53	0	0		103	0	0		153	0		0	203	0	0	0	253	0	0	0	303	0	0		353	0		0
4	1	0	-1	54	0	0		104	0	0	0	154	0		0	204	0	0	0	254	0	0	0	304	0	0	0	354	0		0
5	0	0	0	55	0	0		105	1	0	-1	155	0	0	0	205	0	0	0	255	1	-1	-1	305	0	0	0	355	0		0
6	0	0	0	56	1	0	-1	106	1	0	-1	156	0		0	206	0	0	0	256	0	0	0	306	0	0	0	356	0	0	0
7	1	0	-1	57	1	0	-1	107	1	0	-1	157	0		0	207	1	-1	-1	257	0	0	0	307	1	-1	-1	357	0		0
8		0	0	58	-1	0	1	108	0	0	0	158	0	0	0	208	0	0	0	258	0	0	0	308	0	0	0	358	0		0
9	0	0	0	59	0	0		109	0	0	0	159	0		0	209	-1	0	1	259	0	0	0	309	0	0	0	359	0		0
10		0	0	60		0		110	1	-1	-1	160	0		0	210	1	-1	-1	260	0	0	0	310	0			360	0		0
11	0	0		61	1	-1	-1	111		0		161	0	0	0	211	0	0	0	261	0	0	0	311	0	0		361	0		0
12	1	0	-1	62	1	-1	-1	112	0	0	0	162	0	0	0	212	0	0	0	262	0	0	0	312	1	-1	-1	362	0		0
13		0	0	63	1	0	-1	113	1	0	-1	163	0		0	213	0	0	0	263	0	0	0	313	-1	-1	1	363	0		0
14	0	0	0	64	0	0	0	114	1	0	-1	164	0	0	0	214	0	0	0	264	0	0	0	314	0	0	0	364	0		0
15	1	0	-1	65	0	0	0	115	0	0	0	165	0	0	0	215	0	0	0	265	0	0	0	315	0	0	0	365	0		0
16	0	0	0	66	0	0		116	1	0	-1	166	0	0	0	216	0	0	0	266	1	0	-1	316	1	-1	-1	366	0	0	0
17	0	0	0	67	0	0	0	117	0	0	0	167	0		0	217	0	0	0	267	0	0	0	317	1	0	-1	367	0		0
18	1	0	-1	68	0	0		118	0	0	0	168	1	-1	-1	218	0	0	0	268	0	0	0	318	1	-1	-1	368	0		0
19		0	0	69	0	0		119	0	0	0	169	0		0	219	0	0	0	269	0	0	0	319	1	0	-1	369	0		0
20	0	0	0	70	0	0	0	120	0	0	0	170	0	0	0	220	0	0	0	270	0	0	0	320	-1	0	1	370	0		0
21	0	0	0	71	1	0	-1	121	0	0	0	171	0	0	0	221	0	0	0	271	0	0	0	321	0	0	0	371	0		0
22	0	0	0	72	0	0	0	122	1	-1	-1	172	0	0	0	222	0	0	0	272	0	0	0	322	0	0	0	372	0	0	0
23	0	0	0	73	1	0	-1	123	0	0	0	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	0	0	0
24	0	0	0	74	0	0	0	124	0	0	0	174	0	0	0	224	0	0	0	274	0	0	0	324	1	0	-1	374	0	0	0
25	0	0	0	75	0	0	0	125	0	0	0	175	0	0	0	225	0	0	0	275	0	0	0	325	0	0	0	375	0	0	0
26	1	0	-1	76	0	0	0	126	0	0	0	176	0	0	0	226	0	0	0	276	0	0	0	326	1	0	-1	376	0	0	0
27	0	0	0	77	0	0	0	127	0	0	0	177	0	0	0	227	0	0	0	277	0	0	0	327	1	-1	-1	377	0	0	0
28	1	-1	-1	78	0	0	0	128	0	0	0	178	0	0	0	228	0	0	0	278	0	0	0	328	0	0	0	378	0	0	0
29	0	0	0	79	0	0	0	129	0	0	0	179	0	0	0	229	0	0	0	279	0	0	0	329	0	0	0	379	0	0	0
30	0	0	0	80	0	0		130	1	0	-1	180	0	0	0	230	0	0	0	280	0	0	0	330	-1	0	1	380	0	0	0
31	0	0	0	81	0	0	0	131	0	0	0	181	1	0	-1	231	0	0	0	281	0	0	0	331	1	0	-1	381	0	0	0
32	0	0	0	82	0	0	0	132	0	0	0	182	1	0	-1	232	0	0	0	282	0	0	0	332	0	0	0	382	0	0	0
33	0	0	0	83	0	0		133	1	0	-1	183	0	0	0	233	0	0	0	283	0	0	0	333	0	0	0	383	0	0	0
34	0	0	0	84	1	0	-1	134	1	-1	-1	184	0	0	0	234	1	-1	-1	284	0	0	0	334	0	0	0	384	0		0
35	0	0	0	85	0	0	0	135	0	0	0	185	0	0	0	235	0	0	0	285	0	0	0	335	0	0	0	385	0	0	0
36	0	0	0	86	1	0	-1	136	0	0	0	186	0	0	0	236	0	0	0	286	0	0	0	336	0	0	0	386	0	0	0
37	1	0	-1	87	0	0	0	137	1	0	-1	187	0	0	0	237	0	0	0	287	0	0	0	337	0	0	0	387	0	0	0
38	0	0	0	88	0	0	0	138	1	0	-1	188	1	-1	-1	238	0	0	0	288	0	0	0	338	0	0	0	388	0	0	0
39	0	0	0	89	0	0		139	-1	0	1	189	0	0	0	239	0	0	0	289	0	0	0	339	0	0	0	389	0	0	0
40	0	0	0	90	0	0	0	140	0	0	0	190	0	0	0	240	0	0	0	290	0	0	0	340	0	0	0	390	0		0
41	0	0	0	91	1	0	-1	141	0	0	0	191	0	0	0	241	1	-1	-1	291	-1	0	1	341	0	0	0	391	0	0	0
42	1	-1	-1	92	0	0		142	1	-1	-1	192	0	0	0	242	0	0	0	292	1	-1	-1	342	-1	0	1	392	0		0
43	0	0	0	93	1	0	-1	143	0	0	0	193	0	0	0	243	0	0	0	293	0	0	0	343	0	0	0	393	0		
44	0	0	0	94		0		144	0	0	0	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	0		0
45	0	0		95	1	0	-1	145	1	-1	-1	195	0	0	0	245	0	0	0	295	0	0	0	345	0	0	0	395	0		0
46	1	-1	-1	96	0	0	0	146	0	0	0	196	0	0		246	1	-1	-1	296	0	0	0	346	0	0	0	396			0
47	1	0	-1	97					0	0	0	197	0	0	0	247	0	0	0	297	0	0	0	347	0	0	0	397			0
48		0	0	98			-1	148	0	0	0	198	0	0	0	248	0	0		298	1	-1	-1	348	-1	0	1	398	0		0
49	0	0		99				149	0	0	0	199	0	0		249		-1	-1	299	0	0	0	349	0	0	0	399	0		0
50	1	-1	-1	100				150	0	0	0	200	1		-1	250	0	0	0	300	0	0	0	350	0	0	0	400	0		0

[illegible] = NUMBER OF [illegible]

78 = NUMBER OF POSITIVE WEIGHTS
1[illegible] = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean=33.52
S.D.=17.32

Item Weights for Stewardesses on WIG-NP Scales

Item #	Weights L	I	D
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Item Weights for Telephone Operators on WIG-TOTAL Scales

Item #	L	I	D																												
1	0	0	0	51	0	0	0	101	0	0	0	151	0	0	0	201	0	0	0	251	0	0	0	301	0	0	0	351	0	0	0
2	1	0	-1	52	0	0	0	102	0	0	0	152	-1	1	1	202	0	0	0	252	0	0	0	302	0	0	0	352	0	0	0
3	0	0	0	53	0	0	0	103	0	0	0	153	1	0	-1	203	0	0	0	253	0	0	0	303	0	0	0	353	0	0	0
4	0	0	0	54	0	0	0	104	0	0	0	154	0	0	0	204	1	0	-1	254	0	0	0	304	0	0	0	354	0	0	0
5	-1	0	1	55	0	0	0	105	0	0	0	155	0	0	0	205	0	0	0	255	0	0	0	305	0	0	0	355	0	0	0
6	-1	0	1	56	0	0	0	106	0	0	0	156	0	0	0	206	0	0	0	256	0	0	0	306	0	0	0	356	0	0	0
7	0	0	0	57	0	0	0	107	0	0	0	157	0	0	0	207	0	0	0	257	0	0	0	307	0	0	0	357	0	0	0
8	0	0	0	58	0	0	0	108	0	0	0	158	0	0	0	208	0	0	0	258	0	0	0	308	0	0	0	358	0	0	0
9	0	0	0	59	0	0	0	109	1	1	-1	159	0	0	0	209	0	0	0	259	0	0	0	309	0	0	0	359	0	0	0
10	0	0	0	60	0	0	0	110	1	0	-1	160	0	0	0	210	0	0	0	260	0	0	0	310	-1	0	1	360	0	0	0
11	0	0	0	61	0	0	0	111	0	0	0	161	0	0	0	211	0	0	0	261	0	0	0	311	-1	0	1	361	0	0	0
12	0	0	0	62	0	0	0	112	0	0	0	162	0	0	0	212	0	0	0	262	0	0	0	312	0	0	0	362	0	0	0
13	0	0	0	63	0	0	0	113	0	0	0	163	0	0	0	213	0	0	0	263	0	0	0	313	0	0	0	363	0	0	0
14	1	0	-1	64	0	0	0	114	0	0	0	164	0	0	0	214	0	0	0	264	0	0	0	314	0	0	0	364	0	0	0
15	1	0	-1	65	0	0	0	115	0	0	0	165	0	0	0	215	0	0	0	265	0	0	0	315	0	0	0	365	0	0	0
16	0	0	0	66	1	0	-1	116	0	0	0	166	0	0	0	216	0	0	0	266	1	0	-1	316	-1	1	1	366	1	0	-1
17	1	0	-1	67	0	0	0	117	-1	1	1	167	1	1	-1	217	0	0	0	267	1	-1	-1	317	0	0	0	367	0	0	0
18	0	0	0	68	0	0	0	118	0	0	0	168	0	0	0	218	0	0	0	268	0	0	0	318	0	0	0	368	0	0	0
19	0	0	0	69	0	0	0	119	0	0	0	169	1	0	-1	219	0	0	0	269	0	0	0	319	0	0	0	369	0	0	0
20	1	1	-1	70	0	0	0	120	0	0	0	170	0	0	0	220	0	0	0	270	-1	1	1	320	0	0	0	370	0	0	0
21	0	0	0	71	0	0	0	121	1	0	-1	171	0	0	0	221	0	0	0	271	0	0	0	321	0	0	0	371	1	-1	-1
22	0	0	0	72	1	0	-1	122	0	0	0	172	0	0	0	222	0	0	0	272	0	0	0	322	0	0	0	372	0	0	0
23	0	0	0	73	1	0	-1	123	1	0	-1	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	0	0	0
24	-1	0	1	74	1	1	-1	124	0	0	0	174	0	0	0	224	0	0	0	274	-1	0	1	324	1	0	-1	374	0	0	0
25	1	0	-1	75	1	0	-1	125	0	0	0	175	0	0	0	225	0	0	0	275	0	0	0	325	0	0	0	375	0	0	0
26	0	0	0	76	0	0	0	126	0	0	0	176	0	0	0	226	0	0	0	276	0	0	0	326	0	0	0	376	0	0	0
27	1	0	-1	77	0	0	0	127	1	0	-1	177	0	0	0	227	1	0	-1	277	0	0	0	327	0	0	0	377	0	0	0
28	0	0	0	78	0	0	0	128	0	0	0	178	1	-1	-1	228	0	0	0	278	0	0	0	328	0	0	0	378	0	0	0
29	0	0	0	79	0	0	0	129	0	0	0	179	0	0	0	229	0	0	0	279	1	0	-1	329	-1	0	1	379	0	0	0
30	0	0	0	80	0	0	0	130	0	0	0	180	0	0	0	230	0	0	0	280	0	0	0	330	-1	1	1	380	0	0	0
31	1	0	-1	81	0	0	0	131	0	0	0	181	0	0	0	231	0	0	0	281	0	0	0	331	-1	-1	1	381	0	0	0
32	0	0	0	82	0	0	0	132	0	0	0	182	0	0	0	232	0	0	0	282	0	0	0	332	0	0	0	382	0	0	0
33	-1	0	1	83	1	0	-1	133	0	0	0	183	0	0	0	233	0	0	0	283	0	0	0	333	0	0	0	383	0	0	0
34	1	0	-1	84	0	0	0	134	0	0	0	184	-1	0	1	234	0	0	0	284	0	0	0	334	-1	0	1	384	0	0	0
35	-1	0	1	85	1	1	-1	135	0	0	0	185	0	0	0	235	0	0	0	285	0	0	0	335	0	0	0	385	0	0	0
36	0	0	0	86	0	0	0	136	0	0	0	186	0	0	0	236	0	0	0	286	-1	0	1	336	0	0	0	386	0	0	0
37	0	0	0	87	0	0	0	137	0	0	0	187	0	0	0	237	0	0	0	287	0	0	0	337	0	0	0	387	1	-1	-1
38	0	0	0	88	0	0	0	138	0	0	0	188	0	0	0	238	0	0	0	288	0	0	0	338	0	0	0	388	0	0	0
39	0	0	0	89	1	1	-1	139	0	0	0	189	0	0	0	239	0	0	0	289	0	0	0	339	0	0	0	389	0	0	0
40	0	0	0	90	0	0	0	140	0	0	0	190	0	0	0	240	0	0	0	290	0	0	0	340	0	0	0	390	0	0	0
41	1	0	-1	91	0	0	0	141	0	0	0	191	-1	0	1	241	0	0	0	291	0	0	0	341	0	0	0	391	0	0	0
42	0	0	0	92	0	0	0	142	1	0	-1	192	1	0	-1	242	0	0	0	292	0	0	0	342	0	0	0	392	-1	1	1
43	1	1	-1	93	0	0	0	143	0	0	0	193	0	0	0	243	0	0	0	293	0	0	0	343	0	0	0	393	0	0	0
44	1	0	-1	94	0	0	0	144	0	0	0	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	0	0	0
45	0	0	0	95	1	0	-1	145	0	0	0	195	0	0	0	245	0	0	0	295	0	0	0	345	0	0	0	395	1	0	-1
46	0	0	0	96	0	0	0	146	0	0	0	196	0	0	0	246	0	0	0	296	1	0	-1	346	0	0	0	396	0	0	0
47	0	0	0	97	0	0	0	147	0	0	0	197	0	0	0	247	0	0	0	297	0	0	0	347	0	0	0	397	1	-1	-1
48	1	0	-1	98	0	0	0	148	-1	1	1	198	0	0	0	248	1	-1	-1	298	0	0	0	348	0	0	0	398	-1	0	1
49	0	0	0	99	0	0	0	149	0	0	0	199	0	0	0	249	0	0	0	299	-1	0	1	349	-1	1	1	399	0	0	0
50	0	0	0	100	0	0	0	150	-1	0	1	200	0	0	0	250	0	0	0	300	0	0	0	350	0	0	0	400	0	0	0

71 = NUMBER OF ITEMS WEIGHTED.

86 = NUMBER OF POSITIVE WEIGHTS
78 = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean=24.48
S.D.=13.83

Item Weights for Telephone Operators on WIG-NP Scales

```
         WEIGHTS
Item #   L  I  D
   1     0  0  0 *  51  0  0  0 * 101  0  0  0 * 151  0  0  0 * 201  0  0  0 * 251  0  0  0 * 301  0  0  0 * 351  0  0  0 *
   2     0  0  0 *  52  0  0  0 * 102  0  0  0 * 152  0  0  0 * 202  0  0  0 * 252  0  0  0 * 302  0  0  0 * 352  0  0  0 *
   3     0  0  0 *  53  0  0  0 * 103  0  0  0 * 153  0  0  0 * 203 -1  0  1 * 253  0  0  0 * 303  0  0  0 * 353  0  0  0 *
   4     0  0  0 *  54  0  0  0 * 104  0  0  0 * 154  0  0  0 * 204  0  0  0 * 254  0  0  0 * 304  0  0  0 * 354  0  0  0 *
   5     0  0  0 *  55  0  0  0 * 105  0  0  0 * 155  0  0  0 * 205  0  0  0 * 255  0  0  0 * 305  0  0  0 * 355  0  0  0 *
   6     0  0  0 *  56  0  0  0 * 106  0  0  0 * 156  0  0  0 * 206  0  0  0 * 256  0  0  0 * 306  0  0  0 * 356  0  0  0 *
   7     0  0  0 *  57  0  0  0 * 107  0  0  0 * 157  0  0  0 * 207  0  0  0 * 257  0  0  0 * 307  0  0  0 * 357  0  0  0 *
   8     0  0  0 *  58  0  0  0 * 108  0  0  0 * 158  0  0  0 * 208  0  0  0 * 258  0  0  0 * 308  0  0  0 * 358  0  0  0 *
   9     0  0  0 *  59  0  0  0 * 109  1  0 -1 * 159  0  0  0 * 209  0  0  0 * 259  0  0  0 * 309  0  0  0 * 359  0  0  0 *
  10     0  0  0 *  60  0  0  0 * 110  0  0  0 * 160  0  0  0 * 210  0  0  0 * 260  0  0  0 * 310 -1  0  1 * 360  0  0  0 *
  11     0  0  0 *  61  0  0  0 * 111  0  0  0 * 161  0  0  0 * 211  0  0  0 * 261  0  0  0 * 311  0  0  0 * 361  0  0  0 *
  12     0  0  0 *  62  0  0  0 * 112  0  0  0 * 162  0  0  0 * 212  0  0  0 * 262  0  0  0 * 312  0  0  0 * 362  0  0  0 *
  13     0  0  0 *  63  0  0  0 * 113  0  0  0 * 163  0  0  0 * 213  0  0  0 * 263  0  0  0 * 313  0  0  0 * 363  0  0  0 *
  14     0  0  0 *  64  0  0  0 * 114  0  0  0 * 164  0  0  0 * 214  0  0  0 * 264  0  0  0 * 314  0  0  0 * 364  0  0  0 *
  15     1  0 -1 *  65  0  0  0 * 115  0  0  0 * 165  0  0  0 * 215  0  0  0 * 265  0  0  0 * 315  1  0 -1 * 365  1 -1 -1 *
  16     0  0  0 *  66  1  0 -1 * 116  0  0  0 * 166  0  0  0 * 216  0  0  0 * 266  0  0  0 * 316 -1  1  1 * 366  0  0  0 *
  17     0  0  0 *  67  0  0  0 * 117  0  0  0 * 167  0  0  0 * 217  0  0  0 * 267  0  0  0 * 317 -1  0  1 * 367  0  0  0 *
  18     0  0  0 *  68  0  0  0 * 118  0  0  0 * 168  0  0  0 * 218  0  0  0 * 268  0  0  0 * 318  0  0  0 * 368  0  0  0 *
  19     0  0  0 *  69  0  0  0 * 119  0  0  0 * 169  0  0  0 * 219  0  0  0 * 269  0  0  0 * 319  0  0  0 * 369  0  0  0 *
  20     0  0  0 *  70  0  0  0 * 120  0  0  0 * 170  0  0  0 * 220  0  0  0 * 270 -1  0  1 * 320  0  0  0 * 370  0  0  0 *
  21     0  0  0 *  71  0  0  0 * 121  1  0 -1 * 171  0  0  0 * 221  0  0  0 * 271  0  0  0 * 321  0  0  0 * 371  0  0  0 *
  22     0  0  0 *  72  0  0  0 * 122  0  0  0 * 172  0  0  0 * 222  0  0  0 * 272  0  0  0 * 322  0  0  0 * 372  0  0  0 *
  23     0  0  0 *  73  0  0  0 * 123  1  0 -1 * 173  0  0  0 * 223  0  0  0 * 273  0  0  0 * 323  0  0  0 * 373  0  0  0 *
  24     0  0  0 *  74  1  0 -1 * 124  0  0  0 * 174  0  0  0 * 224  0  0  0 * 274 -1  0  1 * 324  1  0 -1 * 374  0  0  0 *
  25     1  0 -1 *  75  0  0  0 * 125  0  0  0 * 175  0  0  0 * 225  0  0  0 * 275  0  0  0 * 325  0  0  0 * 375  0  0  0 *
  26     0  0  0 *  76  0  0  0 * 126  0  0  0 * 176  0  0  0 * 226  0  0  0 * 276  0  0  0 * 326  0  0  0 * 376  0  0  0 *
  27     0  0  0 *  77  0  0  0 * 127  0  0  0 * 177  0  0  0 * 227  0  0  0 * 277  0  0  0 * 327  0  0  0 * 377  0  0  0 *
  28     0  0  0 *  78  0  0  0 * 128  0  0  0 * 178  1  0 -1 * 228  0  0  0 * 278  0  0  0 * 328  0  0  0 * 378  0  0  0 *
  29     0  0  0 *  79  0  0  0 * 129  0  0  0 * 179  0  0  0 * 229  0  0  0 * 279  0  0  0 * 329 -1  0  1 * 379  0  0  0 *
  30     0  0  0 *  80  0  0  0 * 130  0  0  0 * 180  0  0  0 * 230  0  0  0 * 280  0  0  0 * 330 -1  0  1 * 380  0  0  0 *
  31     0  0  0 *  81  0  0  0 * 131  0  0  0 * 181  0  0  0 * 231  0  0  0 * 281  0  0  0 * 331 -1 -1  1 * 381  0  0  0 *
  32     0  0  0 *  82  0  0  0 * 132  0  0  0 * 182  0  0  0 * 232  0  0  0 * 282  0  0  0 * 332  0  0  0 * 382  0  0  0 *
  33     0  0  0 *  83  0  0  0 * 133  0  0  0 * 183  0  0  0 * 233  0  0  0 * 283  0  0  0 * 333  0  0  0 * 383  0  0  0 *
  34     1  0 -1 *  84  0  0  0 * 134  0  0  0 * 184  0  0  0 * 234  0  0  0 * 284  0  0  0 * 334 -1  0  1 * 384  0  0  0 *
  35     0  0  0 *  85  0  0  0 * 135  0  0  0 * 185  1  0 -1 * 235  0  0  0 * 285  0  0  0 * 335  0  0  0 * 385  0  0  0 *
  36     0  0  0 *  86  0  0  0 * 136  0  0  0 * 186  0  0  0 * 236  0  0  0 * 286 -1  0  1 * 336  0  0  0 * 386  0  0  0 *
  37     0  0  0 *  87  0  0  0 * 137  0  0  0 * 187  0  0  0 * 237  0  0  0 * 287  0  0  0 * 337  0  0  0 * 387  1  0 -1 *
  38     0  0  0 *  88  0  0  0 * 138  0  0  0 * 188  0  0  0 * 238  0  0  0 * 288  0  0  0 * 338  0  0  0 * 388  0  0  0 *
  39     0  0  0 *  89  1  1 -1 * 139  0  0  0 * 189  0  0  0 * 239  0  0  0 * 289  0  0  0 * 339  0  0  0 * 389  0  0  0 *
  40     0  0  0 *  90  0  0  0 * 140  0  0  0 * 190  0  0  0 * 240  0  0  0 * 290  0  0  0 * 340  0  0  0 * 390  0  0  0 *
  41     0  0  0 *  91  0  0  0 * 141  0  0  0 * 191  0  0  0 * 241  0  0  0 * 291  0  0  0 * 341  0  0  0 * 391 -1  0  1 *
  42     0  0  0 *  92  0  0  0 * 142  1 -1 -1 * 192  1  0 -1 * 242  0  0  0 * 292  0  0  0 * 342  0  0  0 * 392  0  0  0 *
  43     1  1 -1 *  93  0  0  0 * 143  0  0  0 * 193  0  0  0 * 243  0  0  0 * 293  0  0  0 * 343  0  0  0 * 393  0  0  0 *
  44     1  0 -1 *  94  0  0  0 * 144  0  0  0 * 194  0  0  0 * 244  0  0  0 * 294  0  0  0 * 344  0  0  0 * 394  0  0  0 *
  45     0  0  0 *  95  1  0 -1 * 145  0  0  0 * 195  0  0  0 * 245  0  0  0 * 295  0  0  0 * 345  0  0  0 * 395  0  0  0 *
  46     0  0  0 *  96  0  0  0 * 146  0  0  0 * 196  0  0  0 * 246  0  0  0 * 296  0  0  0 * 346  0  0  0 * 396  0  0  0 *
  47     0  0  0 *  97  0  0  0 * 147  0  0  0 * 197  0  0  0 * 247  0  0  0 * 297  0  0  0 * 347  0  0  0 * 397  1  0 -1 *
  48     0  0  0 *  98  0  0  0 * 148  0  0  0 * 198  0  0  0 * 248  0  0  0 * 298  0  0  0 * 348  0  0  0 * 398  1  0 -1 *
  49     0  0  0 *  99  0  0  0 * 149  0  0  0 * 199  0  0  0 * 249  0  0  0 * 299  0  0  0 * 349  0  0  0 * 399  0  0  0 *
  50     0  0  0 * 100  0  0  0 * 150  0  0  0 * 200  0  0  0 * 250  0  0  0 * 300  0  0  0 * 350  0  0  0 * 400  0  0  0 *

 34 = NUMBER OF ITEMS WEIGHTED

 37 = NUMBER OF POSITIVE WEIGHTS
 37 = NUMBER OF NEGATIVE WEIGHTS
```

For Conversion
Mean=13.16
S.D.= 7.35

Item Weights for Army-Enlisted on WIG-TOTAL Scales

Item #	Weights L	I	D
1			
2			
3	1		-1
4			
5			
6	-1		1
7			
8			
9		1	1
10			
11			
12			
13			
14	1		-1
15			
16			
17			
18			
19			
20	1		-1
21			
22			
23	1		-1
24	-1		1
25	1		-1
26	-1		1
27			
28	-1		1
29			
30			
31			
32	1		-1
33			
34	-1		1
35			
36			
37	1	-1	-1
38	1		-1
39			
40			
41			
42			
43	1		-1
44	1		-1
45			
46			
47	1		-1
48			
49			
50			

Item #	Weight
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	-1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
20	1
21	1
22	1
23	1
24	1
25	1
26	1
27	1
28	1
29	1
30	1
31	1
32	1
33	1
34	1
35	1
36	1
37	1
38	1
39	1
40	1
41	1
42	1
43	1
44	1
45	1
46	1
47	1
48	1
49	1
50	1

Item #	Weight
51	1
52	1
53	1
54	1
55	1
56	1
57	1
58	1
59	1
60	1
61	1
62	1
63	1
64	1
65	1
66	1
67	1
68	1
69	1
70	1
71	1
72	1
73	1
74	1
75	1
76	1
77	1
78	1
79	1
80	1
81	1
82	1
83	1
84	1
85	1
86	1
87	1
88	1
89	1
90	1
91	1
92	1
93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

Item #	Weight
101	-1
102	1
103	1
104	1
105	-1
106	-1
107	1
108	1
109	1
110	1
111	1
112	1
113	1
114	1
115	1
116	1
117	-1
118	1
119	1
120	1
121	1
122	1
123	1
124	1
125	1
126	1
127	1
128	1
129	1
130	1
131	1
132	1
133	1
134	1
135	1
136	-1
137	-1
138	-1
139	-1
140	-1
141	1
142	1
143	1
144	1
145	-1
146	1
147	1
148	1
149	1
150	-1

Item #	Weight
151	1
152	1
153	1
154	1
155	1
156	-1
157	1
158	1
159	1
160	1
161	1
162	1
163	1
164	1
165	1
166	1
167	1
168	1
169	1
170	1
171	1
172	1
173	1
174	1
175	1
176	1
177	1
178	1
179	-1
180	1
181	1
182	1
183	1
184	1
185	-1
186	-1
187	1
188	1
189	-1
190	-1
191	1
192	1
193	1
194	1
195	1
196	1
197	1
198	1
199	1
200	1

Item #	Weight
201	-1
202	-1
203	1
204	1
205	-1
206	1
207	1
208	1
209	1
210	1
211	1
212	1
213	1
214	1
215	1
216	1
217	1
218	1
219	1
220	1
221	1
222	1
223	1
224	1
225	-1
226	1
227	1
228	1
229	-1
230	1
231	1
232	1
233	1
234	1
235	1
236	1
237	1
238	1
239	1
240	1
241	1
242	1
243	1
244	1
245	1
246	1
247	1
248	1
249	1
250	1

Item #	Weight
251	1
252	1
253	1
254	1
255	1
256	1
257	1
258	1
259	1
260	1
261	1
262	1
263	1
264	1
265	1
266	1
267	1
268	1
269	1
270	1
271	1
272	1
273	1
274	1
275	1
276	1
277	1
278	1
279	1
280	1
281	1
282	1
283	1
284	1
285	1
286	1
287	1
288	1
289	1
290	1
291	1
292	1
293	1
294	1
295	1
296	1
297	1
298	1
299	1
300	1

Item #	Weight
301	1
302	1
303	1
304	1
305	1
306	1
307	1
308	1
309	1
310	1
311	1
312	1
313	1
314	1
315	1
316	1
317	1
318	1
319	1
320	1
321	1
322	1
323	1
324	1
325	1
326	1
327	1
328	1
329	1
330	1
331	1
332	1
333	1
334	1
335	1
336	1
337	1
338	1
339	1
340	1
341	1
342	1
343	1
344	1
345	1
346	1
347	1
348	1
349	1
350	1

Item #	Weight
351	1
352	1
353	1
354	1
355	1
356	1
357	1
358	1
359	1
360	1
361	1
362	1
363	1
364	1
365	1
366	1
367	1
368	1
369	1
370	1
371	1
372	1
373	1
374	1
375	1
376	1
377	1
378	1
379	1
380	1
381	1
382	1
383	1
384	1
385	1
386	1
387	1
388	1
389	1
390	1
391	1
392	1
393	1
394	1
395	1
396	1
397	1
398	1
399	1
400	1

70 = NUMBER OF ITEMS BEING SCORED

41 = NUMBER OF POSITIVE WEIGHTS
77 = NUMBER OF NEGATIVE WEIGHTS

For Conversion:
Mean= 8.68
S.D.=14.97

Item Weights for Army-Enlisted on WIG-NP Scales

Weights

Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D
1	0	0	0	51	0	0	0	101	0	0	0	151	0	0	0	201	0	0	0	251	0	0	0	301	0	0	0	351	0	0	0
2	0	0	0	52	0	0	0	102	0	0	0	152	0	0	0	202	-1	1	1	252	1	-1	-1	302	0	0	0	352	0	0	0
3	1	0	-1	53	1	0	-1	103	0	0	0	153	0	0	0	203	0	0	0	253	0	0	0	303	-1	1	1	353	0	0	0
4	0	0	0	54	0	0	0	104	0	0	0	154	0	0	0	204	0	0	0	254	0	0	0	304	0	0	0	354	0	0	0
5	0	0	0	55	0	0	0	105	0	0	0	155	0	0	0	205	-1	1	1	255	0	0	0	305	0	0	0	355	0	0	0
6	0	0	0	56	0	0	0	106	0	0	0	156	-1	1	1	206	0	0	0	256	0	0	0	306	0	0	0	356	0	0	0
7	-1	0	1	57	1	0	-1	107	0	0	0	157	0	0	0	207	0	0	0	257	0	0	0	307	0	0	0	357	0	0	0
8	1	0	-1	58	0	0	0	108	0	0	0	158	-1	1	1	208	0	0	0	258	0	0	0	308	0	0	0	358	0	0	0
9	0	0	0	59	0	0	0	109	0	0	0	159	0	0	0	209	0	0	0	259	0	0	0	309	0	0	0	359	0	0	0
10	0	0	0	60	0	0	0	110	-1	0	1	160	1	0	-1	210	0	0	0	260	-1	1	1	310	1	0	-1	360	0	0	0
11	0	0	0	61	-1	0	1	111	0	0	0	161	0	0	0	211	0	0	0	261	0	0	0	311	0	0	0	361	0	0	0
12	0	0	0	62	-1	0	1	112	0	0	0	162	0	0	0	212	0	0	0	262	0	0	0	312	-1	-1	1	362	0	0	0
13	0	0	0	63	0	0	0	113	0	0	0	163	0	0	0	213	0	0	0	263	1	0	-1	313	1	0	-1	363	0	0	0
14	0	0	0	64	0	0	0	114	-1	0	1	164	0	0	0	214	-1	0	1	264	-1	-1	1	314	0	0	0	364	0	0	0
15	-1	0	1	65	-1	0	1	115	-1	0	1	165	0	0	0	215	0	0	0	265	0	0	0	315	-1	0	1	365	0	0	0
16	0	0	0	66	0	0	0	116	0	0	0	166	0	0	0	216	0	0	0	266	-1	0	1	316	0	0	0	366	0	0	0
17	0	0	0	67	0	0	0	117	0	0	0	167	0	0	0	217	0	0	0	267	0	0	0	317	1	0	-1	367	0	0	0
18	0	0	0	68	0	0	0	118	-1	0	1	168	0	0	0	218	0	0	0	268	1	0	-1	318	0	0	0	368	0	0	0
19	0	0	0	69	0	0	0	119	0	0	0	169	-1	0	1	219	0	0	0	269	0	0	0	319	0	0	0	369	0	0	0
20	0	0	0	70	0	0	0	120	0	0	0	170	0	0	0	220	0	0	0	270	1	0	-1	320	0	0	0	370	0	0	0
21	0	0	0	71	0	0	0	121	0	0	0	171	0	0	0	221	0	0	0	271	0	0	0	321	1	-1	-1	371	-1	1	1
22	0	0	0	72	0	0	0	122	0	0	0	172	0	0	0	222	0	0	0	272	0	0	0	322	0	0	0	372	0	0	0
23	0	0	0	73	1	0	-1	123	0	0	0	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	0	0	0
24	0	0	0	74	0	0	0	124	1	0	-1	174	0	0	0	224	0	0	0	274	1	0	-1	324	-1	0	1	374	0	0	0
25	0	0	0	75	1	-1	-1	125	0	0	0	175	0	0	0	225	0	0	0	275	0	0	0	325	0	0	0	375	0	0	0
26	-1	0	1	76	0	0	0	126	0	0	0	176	0	0	0	226	0	0	0	276	0	0	0	326	0	0	0	376	0	0	0
27	-1	0	1	77	0	0	0	127	0	0	0	177	0	0	0	227	-1	1	1	277	0	0	0	327	-1	1	1	377	0	0	0
28	-1	0	1	78	0	0	0	128	0	0	0	178	-1	1	1	228	0	0	0	278	0	0	0	328	0	0	0	378	0	0	0
29	0	0	0	79	0	0	0	129	0	0	0	179	-1	1	1	229	0	0	0	279	0	0	0	329	0	0	0	379	0	0	0
30	0	0	0	80	0	0	0	130	0	0	0	180	0	0	0	230	0	0	0	280	0	0	0	330	0	0	0	380	0	0	0
31	-1	0	1	81	1	0	-1	131	0	0	0	181	1	0	-1	231	0	0	0	281	0	0	0	331	0	0	0	381	0	0	0
32	1	0	-1	82	0	0	0	132	0	0	0	182	1	0	-1	232	0	0	0	282	0	0	0	332	1	1	-1	382	0	0	0
33	0	0	0	83	0	0	0	133	0	0	0	183	-1	1	1	233	0	0	0	283	0	0	0	333	0	0	0	383	0	0	0
34	-1	0	1	84	1	0	-1	134	0	0	0	184	1	0	-1	234	0	0	0	284	0	0	0	334	1	0	-1	384	0	0	0
35	1	0	-1	85	-1	0	1	135	0	0	0	185	-1	0	1	235	0	0	0	285	1	0	-1	335	0	0	0	385	0	0	0
36	0	0	0	86	-1	0	1	136	0	0	0	186	-1	1	1	236	0	0	0	286	0	0	0	336	0	0	0	386	0	0	0
37	1	0	-1	87	0	0	0	137	-1	0	1	187	0	0	0	237	0	0	0	287	0	0	0	337	1	-1	-1	387	-1	1	1
38	0	0	0	88	0	0	0	138	-1	0	1	188	0	0	0	238	0	0	0	288	0	0	0	338	0	0	0	388	0	0	0
39	-1	0	1	89	0	0	0	139	0	0	0	189	-1	0	1	239	0	0	0	289	0	0	0	339	0	0	0	389	0	0	0
40	0	0	0	90	0	0	0	140	0	0	0	190	-1	0	1	240	0	0	0	290	0	0	0	340	0	0	0	390	0	0	0
41	0	0	0	91	0	0	0	141	0	0	0	191	0	0	0	241	-1	1	1	291	0	0	0	341	0	0	0	391	0	0	0
42	0	0	0	92	0	0	0	142	0	0	0	192	0	0	0	242	0	0	0	292	0	0	0	342	0	0	0	392	0	0	0
43	0	0	0	93	0	0	0	143	0	0	0	193	0	0	0	243	0	0	0	293	0	0	0	343	0	0	0	393	0	0	0
44	0	0	0	94	0	0	0	144	0	0	0	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	1	0	-1
45	1	0	-1	95	-1	0	1	145	-1	0	1	195	0	0	0	245	0	0	0	295	0	0	0	345	0	0	0	395	-1	0	1
46	-1	0	1	96	0	0	0	146	0	0	0	196	0	0	0	246	0	0	0	296	0	0	0	346	0	0	0	396	0	0	0
47	1	0	-1	97	0	0	0	147	0	0	0	197	0	0	0	247	-1	1	1	297	0	0	0	347	0	0	0	397	0	0	0
48	-1	0	1	98	0	0	0	148	0	0	0	198	0	0	0	248	0	0	0	298	0	0	0	348	0	0	0	398	0	0	0
49	0	0	0	99	1	0	-1	149	-1	1	1	199	0	0	[illegible]	249	0	0	0	299	0	0	0	349	0	0	0	399	0	0	0
50	-1	0	1	100	0	0	0	150	0	0	0	200	-1	0	1	250	0	0	0	300	0	0	0	350	0	0	0	400	0	0	0

86 = NUMBER OF ITEMS WEIGHTED

104 = SUM OF POSITIVE WEIGHTS

92 = SUM OF NEGATIVE WEIGHTS

For Conversion
Mean=14.1[illegible]
S.D.=21.1

Item Weights for Navy-Enlisted on WIG-TOTAL Scales

Item #	Weights L	I	D
1	-		
2			
3			
4			
5	-1		1
6			
7			
8	1		-1
9	-1	1	
10			
11			
12	1		
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24	-1		
25	1		-1
26	-1		1
27			
28	-1		
29			
30			
31			
32	1		-1
33	-1		
34	-1		
35			
36			
37			
38	1		-1
39			
40	1		-1
41			
42			
43			
44			
45			
46			
47			
48			
49	-1		1
50			

Item #	Weight	Item #	Weight	Item #	Weight	Item #	Weight	Item #	Weight	Item #	Weight	Item #	Weight	Item #	Weight	Item #	Weight	Item #	Weight
51	*	101	*	151	*	201	*	251	*	301	*	351	*	401	*	451	*	501	*
52	*	102	*	152	*	202	*	252	1	-1	-1	*	302	0	0	0	*	352	0	0	0	*
53	*	103	*	153	*	203	*	253	0	0	0	*	303	0	0	0	*	353	1	0	-1	*
54	*	104	*	154	*	204	*	254	0	0	0	*	304	0	0	0	*	354	0	0	0	*
55	*	105	1	0	-1	*	155	0	0	0	*	205	*	255	0	0	0	*	305	0	0	0	*	355	0	0	0	*
56	*	106	0	0	0	*	156	-1	1	1	*	206	0	0	0	*	256	0	0	0	*	306	0	0	0	*	356	0	0	0	*
57	*	107	*	0	0	*	157	0	0	0	*	207	0	0	0	*	257	0	0	0	*	307	0	0	0	*	357	0	0	0	*
58	*	108	*	0	0	*	158	0	0	0	*	208	0	0	0	*	258	0	0	0	*	308	0	0	0	*	358	0	0	0	*
59	*	109	*	0	0	*	159	0	0	0	*	209	0	0	0	*	259	0	0	0	*	309	0	0	0	*	359	0	0	0	*
60	*	110	*	0	0	*	160	0	0	0	*	210	0	0	0	*	260	0	0	0	*	310	0	0	0	*	360	0	0	0	*
61	*	111	*	0	0	*	161	0	0	0	*	211	0	0	0	*	261	0	0	0	*	311	0	0	0	*	361	1	1	-1	*
62	*	112	-1	1	0	*	162	0	0	0	*	212	-1	1	0	*	262	0	0	0	*	312	-1	0	1	*	362	0	0	0	*
63	*	113	0	0	0	*	163	1	-1	0	*	213	0	0	0	*	263	0	0	0	*	313	0	0	0	*	363	0	0	0	*
64	*	114	0	0	0	*	164	0	0	0	*	214	0	0	0	*	264	0	0	0	*	314	0	0	0	*	364	0	0	0	*
65	*	115	0	0	0	*	165	-1	1	0	*	215	0	0	0	*	265	0	0	0	*	315	-1	0	1	*	365	0	0	0	*
66	*	116	0	0	0	*	166	0	0	0	*	216	0	0	0	*	266	-1	0	1	*	316	0	0	0	*	366	0	0	0	*
67	*	117	-1	1	0	*	167	0	0	0	*	217	0	0	0	*	267	0	0	0	*	317	1	0	-1	*	367	0	0	0	*
68	*	118	-1	1	0	*	168	0	0	0	*	218	0	0	0	*	268	1	0	-1	*	318	0	0	0	*	368	0	0	0	*
69	*	119	0	0	0	*	169	0	0	0	*	219	0	0	0	*	269	0	0	0	*	319	0	0	0	*	369	0	0	0	*
70	*	120	0	0	0	*	170	0	0	0	*	220	0	0	0	*	270	0	0	0	*	320	0	0	0	*	370	0	0	0	*
71	*	121	0	0	0	*	171	0	0	0	*	221	0	0	0	*	271	0	0	0	*	321	0	0	0	*	371	0	0	0	*
72	*	122	0	0	0	*	172	0	0	0	*	222	0	0	0	*	272	0	0	0	*	322	0	0	0	*	372	-1	0	1	*
73	*	123	1	-1	1	*	173	0	0	0	*	223	0	0	0	*	273	0	0	0	*	323	0	0	0	*	373	0	0	0	*
74	*	124	0	-1	1	*	174	0	0	0	*	224	0	0	0	*	274	-1	0	1	*	324	0	0	0	*	374	0	0	0	*
75	*	125	0	-1	1	*	175	0	0	0	*	225	0	0	0	*	275	0	0	0	*	325	0	0	0	*	375	0	0	0	*
76	*	126	1	-1	1	*	176	1	-1	0	*	226	0	0	0	*	276	0	0	0	*	326	0	0	0	*	376	0	0	0	*
77	*	127	0	0	0	*	177	1	-1	0	*	227	0	0	0	*	277	0	0	0	*	327	0	0	0	*	377	0	0	0	*
78	*	128	0	0	0	*	178	0	0	0	*	228	0	0	0	*	278	-1	-1	1	*	328	1	0	-1	*	378	0	0	0	*
79	*	129	0	0	0	*	179	-1	1	1	*	229	-1	0	1	*	279	0	0	0	*	329	0	0	0	*	379	0	0	0	*
80	*	130	0	0	0	*	180	0	0	0	*	230	0	0	0	*	280	0	0	0	*	330	0	0	0	*	380	0	0	0	*
81	*	131	0	0	0	*	181	0	0	0	*	231	0	0	0	*	281	1	0	-1	*	331	1	1	-1	*	381	0	0	0	*
82	*	132	1	-1	0	*	182	0	0	0	*	232	0	0	0	*	282	0	0	0	*	332	1	1	-1	*	382	-1	1	1	*
83	*	133	0	0	0	*	183	0	0	0	*	233	0	0	0	*	283	0	0	0	*	333	0	0	0	*	383	0	0	0	*
84	*	134	-1	1	0	*	184	0	0	0	*	234	0	0	0	*	284	0	0	0	*	334	0	0	0	*	384	0	0	0	*
85	*	135	0	0	0	*	185	0	0	0	*	235	0	0	0	*	285	0	0	0	*	335	0	0	0	*	385	0	0	0	*
86	*	136	-1	0	1	*	186	0	0	0	*	236	0	0	0	*	286	0	0	0	*	336	0	0	0	*	386	0	0	0	*
87	*	137	-1	1	1	*	187	0	0	0	*	237	0	0	0	*	287	0	0	0	*	337	0	0	0	*	387	0	0	0	*
88	*	138	-1	1	1	*	188	0	0	0	*	238	0	0	0	*	288	0	0	0	*	338	0	0	0	*	388	0	0	0	*
89	*	139	-1	1	1	*	189	-1	1	1	*	239	0	0	0	*	289	0	0	0	*	339	0	0	0	*	389	0	0	0	*
90	*	140	0	0	0	*	190	-1	1	1	*	240	0	0	0	*	290	0	0	0	*	340	0	0	0	*	390	0	0	0	*
91	*	141	-1	1	1	*	191	-1	1	1	*	241	0	0	0	*	291	0	0	0	*	341	0	0	0	*	391	0	0	0	*
92	*	142	0	0	0	*	192	1	-1	0	*	242	0	0	0	*	292	1	-1	-1	*	342	0	0	0	*	392	0	0	0	*
93	*	143	0	0	0	*	193	0	0	0	*	243	0	0	0	*	293	0	0	0	*	343	0	0	0	*	393	0	0	0	*
94	*	144	0	0	0	*	194	-1	1	1	*	244	0	0	0	*	294	-1	1	1	*	344	0	0	0	*	394	0	0	0	*
95	*	145	-1	1	1	*	195	-1	1	1	*	245	0	0	0	*	295	0	0	0	*	345	0	0	0	*	395	0	0	0	*
96	*	146	0	0	0	*	196	0	0	0	*	246	0	0	0	*	296	1	0	-1	*	346	0	0	0	*	396	0	0	0	*
97	*	147	0	0	0	*	197	0	0	0	*	247	0	0	0	*	297	0	0	0	*	347	0	0	0	*	397	0	0	0	*
98	*	148	-1	1	1	*	198	0	0	0	*	248	0	0	0	*	298	0	0	0	*	348	-1	1	1	*	398	0	0	0	*
99	*	149	0	0	0	*	199	0	0	0	*	249	0	0	0	*	299	-1	1	1	*	349	-1	0	1	*	399	0	0	0	*
100	*	150	-1	0	1	*	200	0	0	0	*	250	0	0	0	*	300	0	0	0	*	350	0	0	0	*	400	0	0	0	*

77 = [illegible] OF ITS SCALES

97 = [illegible] OF ITS SCALES
98 = [illegible] OF ITS SCALES

For Conversion:
Mean=17.02
S.D.=17.97

Item Weights for Navy-Enlisted on WIG-NP Scales

Weights

Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D	Item #	L	I	D
1		0		51		0	0	101	0	0	0	151	0	0	0	201	0	0	0	251	0	0	0	301	0	0	0	351	0	0	0
2	-1		1	52	0			102	0	0	0	152	0		0	202	-1	0	1	252	0	0	0	302	0	0	0	352	0	0	0
3	0	0		53		0		103	0	0	0	153	-1	1	1	203	0	0	0	253	0	0	0	303	0	0	0	353	0	0	0
4	0	0	0	54	0	0	0	104	0	0	0	154	0	0	0	204	0	0	0	254	0	0	0	304	0	0	0	354	0	0	0
5	0	0	0	55	0	0	0	105	0	0	0	155	0	0	0	205	-1	1	1	255	0	0	0	305	0	0	0	355	0	0	0
6	0	0	0	56	0	0	0	106	-1	1	1	156	-1	0	1	206	-1	1	1	256	0	0	0	306	0	0	0	356	0	0	0
7	0	0	0	57	0	0	0	107	-1	0	1	157	0	0	0	207	-1	0	1	257	0	0	0	307	0	0	0	357	0	0	0
8	1	0	-1	58	0	0	0	108	0	0	0	158	0	0	0	208	0	0	0	258	0	0	0	308	0	0	0	358	0	0	0
9	0	0	0	59	0	0	0	109	0	0	0	159	0	0	0	209	0	0	0	259	0	0	0	309	0	0	0	359	0	0	0
10	0	0	0	60	0	0	0	110	-1	0	1	160	0	0	0	210	0	0	0	260	0	0	0	310	1	1	-1	360	0	0	0
11	0	0		61	-1	0	1	111	0	0	0	161	0	0	0	211	0	0	0	261	1	-1	-1	311	0		0	361	0	0	0
12	1	0	-1	62	-1	0	1	112	0	0	0	162	0	0	0	212	-1	1	1	262	0	0	0	312	-1	0	1	362	0	0	0
13	0	0		63	0	0	0	113	0	0	0	163	1	0	-1	213	0	0	0	263	0	0	0	313	0	0	0	363	0	0	0
14	0	0	0	64	0	0	0	114	0	0	0	164	0	0	0	214	-1	0	1	264	0	0	0	314	0	0	0	364	0	0	0
15	-1	0	1	65	-1	1	1	115	-1	0	1	165	0	0	0	215	0	0	0	265	0	0	0	315	-1	0	1	365	0	0	0
16	0		0	66	0	0	0	116	-1	0	1	166	0	0	0	216	0	0	0	266	-1	0	1	316	0	0	0	366	0	0	0
17	0	0	0	67	0	0	0	117	0	0	0	167	0	0	0	217	0	0	0	267	0	0	0	317	1	0	-1	367	0	0	0
18	-1	0	1	68	0	0	0	118	-1	0	1	168	0	0	0	218	0	0	0	268	1	0	-1	318	0	0	0	368	0	0	0
19	0	0	0	69	0	0	0	119	0	0	0	169	-1		1	219	0	0	0	269	0	0	0	319	0	0	0	369	0	0	0
20	0			70	0	0	0	120	-1	0	1	170	0	0	0	220	0	0	0	270	0	0	0	320	0	0	0	370	0	0	0
21	-1	0	1	71	0	0	0	121	0	0	0	171	0	0	0	221	0	0	0	271	0	0	0	321	0	0	0	371	-1	1	1
22	0	0	0	72	0	0	0	122	0	0	0	172	0	0	0	222	0	0	0	272	0	0	0	322	0	0	0	372	0	0	0
23	0	0	0	73	1	0	-1	123	0	0	0	173	0	0	0	223	0	0	0	273	0	0	0	323	0	0	0	373	-1	0	1
24	0	0	0	74	0	0	0	124	0	0	0	174	0	0	0	224	0	0	0	274	0	0	0	324	0	0	0	374	0	0	0
25	0	0	0	75	0	0	0	125	0	0	0	175	0	0	0	225	0	0	0	275	0	0	0	325	0	0	0	375	0	0	0
26	-1	0	1	76	0	0	0	126	0	0	0	176	0	0	0	226	0	0	0	276	0	0	0	326	0	0	0	376	0	0	0
27	0	0	0	77	0	0	0	127	0	0	0	177	0	0	0	227	-1	1	1	277	0	0	0	327	-1	0	1	377	0	0	0
28	-1	0	1	78	0	0	0	128	0	0	0	178	-1	1	1	228	0	0	0	278	0	0	0	328	1	0	-1	378	0	0	0
29	0	0		79	0	0	0	129	0	0	0	179	-1	1	1	229	0	0	0	279	-1	0	1	329	0	0	0	379	0	0	0
30	0	0	0	80	0	0	0	130	0	0	0	180	0	0	0	230	0	0	0	280	0	0	0	330	0	0	0	380	0	0	0
31	-1	0	1	81	0	0	0	131	0	0	0	181	0	0	0	231	0	0	0	281	1	-1	-1	331	1	1	-1	381	0	0	0
32	1	0	-1	82	0	0	0	132	1	0	-1	182	0	0	0	232	0	0	0	282	0	0	0	332	1	1	-1	382	0	0	0
33	0	0	0	83	0	0	0	133	0	0	0	183	-1	1	1	233	0	0	0	283	0	0	0	333	0	0	0	383	0	0	0
34	-1	0	1	84	0	0	0	134	0	0	0	184	0	0	0	234	0	0	0	284	0	0	0	334	0	0	0	384	1	0	-1
35	0	0	0	85	-1	0	1	135	0	0	0	185	0	0	0	235	-1	1	1	285	0	0	0	335	0	0	0	385	0	0	0
36	0	0	0	86	0	0	0	136	0	0	0	186	-1	0	1	236	0	0	0	286	0	0	0	336	0	0	0	386	0	0	0
37	0	0	0	87	0	0	0	137	-1	0	1	187	0	0	0	237	0	0	0	287	0	0	0	337	0	0	0	387	-1	0	1
38	0	0	0	88	0	0	0	138	-1	0	1	188	0	0	0	238	0	0	0	288	0	0	0	338	0	0	0	388	0	0	0
39	-1	0	1	89	0	0	0	139	0	0	0	189	-1	1	1	239	0	0	0	289	0	0	0	339	0	0	0	389	0	0	0
40	1	0	-1	90	0	0	0	140	0	0	0	190	-1	1	1	240	0	0	0	290	0	0	0	340	0	0	0	390	0	0	0
41	-1	1	1	91	0	0	0	141	-1	1	1	191	0		0	241	-1	1	1	291	0	0	0	341	1	0	-1	391	0	0	0
42	0	0	0	92	0	0	0	142	0	0	0	192	0	0	0	242	0	0	0	292	0	0	0	342	0	0	0	392	0	0	0
43	0	0	0	93	0	0	0	143	0	0	0	193	0	0	0	243	0	0	0	293	0	0	0	343	0	0	0	393	0	0	0
44	0	0	0	94	0	0	0	144	-1	1	1	194	0	0	0	244	0	0	0	294	0	0	0	344	0	0	0	394	0	0	0
45	0	0	0	95	-1	0	1	145	-1	0	1	195	0	0	0	245	0	0	0	295	0	0	0	345	0		0	395	-1	0	1
46	-1	0	1	96	0	0		146	0	0	0	196	0	0	0	246	0	0	0	296	0	0	0	346	0	0	0	396	0	0	0
47	0	0	0	97	-1	0	1	147	0	0	0	197	0	0	0	247	-1	1	1	297	1	1	-1	347	0		0	397	-1	1	1
48	0	0	0	98	0	0	0	148	0	0	0	198	0	0	0	248	-1	1	1	298	1	0	-1	348	-1	0	1	398	0	0	0
49	0	0	0	99	0	0	0	149	-1	1	1	199	0	0	0	249	0	0	0	299	0	0		349	0		0	399	0	0	0
50	-1	0	1	100	0	0	0	150	0	0	0	200	-1		1	250	0	0		300	1	1	-1	350	0	0	0	400	0	0	0

83 = NUMBER OF ITEMS WEIGHTED

111 = NUMBER OF POSITIVE WEIGHTS
85 = NUMBER OF NEGATIVE WEIGHTS

For Conversion
Mean 15.[illegible]
S.D. 4.31